

SCHEMATIC DIAGRAM

Models TU-65GD1E (AVC)  
LC-65GD1E (Display)

CONTENTS

	Page
DESCRIPTION OF SCHEMATIC DIAGRAM .....	D2
AVC SYSTEM	
FRONT Unit.....	D3 ~ D4
PC CARD Unit.....	D5 ~ D12
CPU Unit .....	D13 ~ D22
*Refer to the TU-45GD1E for the following item.	
AV, AUDIO IF, DVI, MAIN, TMDS-TX, DVB (IBO), POWER, DC/DC CONVERTER Unit	
DISPLAY	
TCON TOP Unit .....	D23 ~ D46
TCON BOTTOM Unit .....	D47 ~ D58
TMDS-RX Unit .....	D59 ~ D62
LVDS REPEATER Unit .....	D63 ~ D64
LINE FILTER Unit .....	D65 ~ D66
MAIN POWER Unit .....	D67 ~ D68
SUB POWER Unit .....	D69 ~ D70
INVERTER-1 Unit .....	D71 ~ D72
INVERTER-2 Unit .....	D73 ~ D74
INVERTER-3 Unit .....	D75 ~ D76
INVERTER-4 Unit .....	D77 ~ D78
INVERTER-5 Unit .....	D79 ~ D80
INVERTER-6 Unit .....	D81 ~ D82
KEY Unit .....	D83
R/C, LED Unit .....	D84
EXT-SP Unit .....	D85

DESCRIPTION OF SCHEMATIC DIAGRAM

VOLTAGE MEASUREMENT CONDITION:

- 1. The voltages at test points are measured on the stable supply voltage of AC 220-240V. Signals are fed by a colour bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

- 1. The unit of resistance "Ω" is omitted.  
(K=kΩ=1000 Ω, M=MΩ).
- 2. All resistors are ± 5%, unless otherwise noted.  
(K= ± 10%, F= ± 1%, D= ± 0.5%)
- 3. All resistors are 1/16W, unless otherwise noted.

CAPACITOR

- 1. All capacitors are μF, unless otherwise noted.  
(P=pF=μμF).
- 2. All capacitors are 50V, unless otherwise noted.


CAUTION:

This circuit diagram is original one, therefore there may be a slight difference from yours.

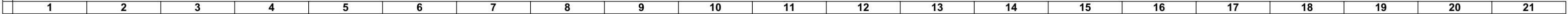
SAFETY NOTES:

- 1. DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
- 2. SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

IMPORTANT SAFETY NOTICE:

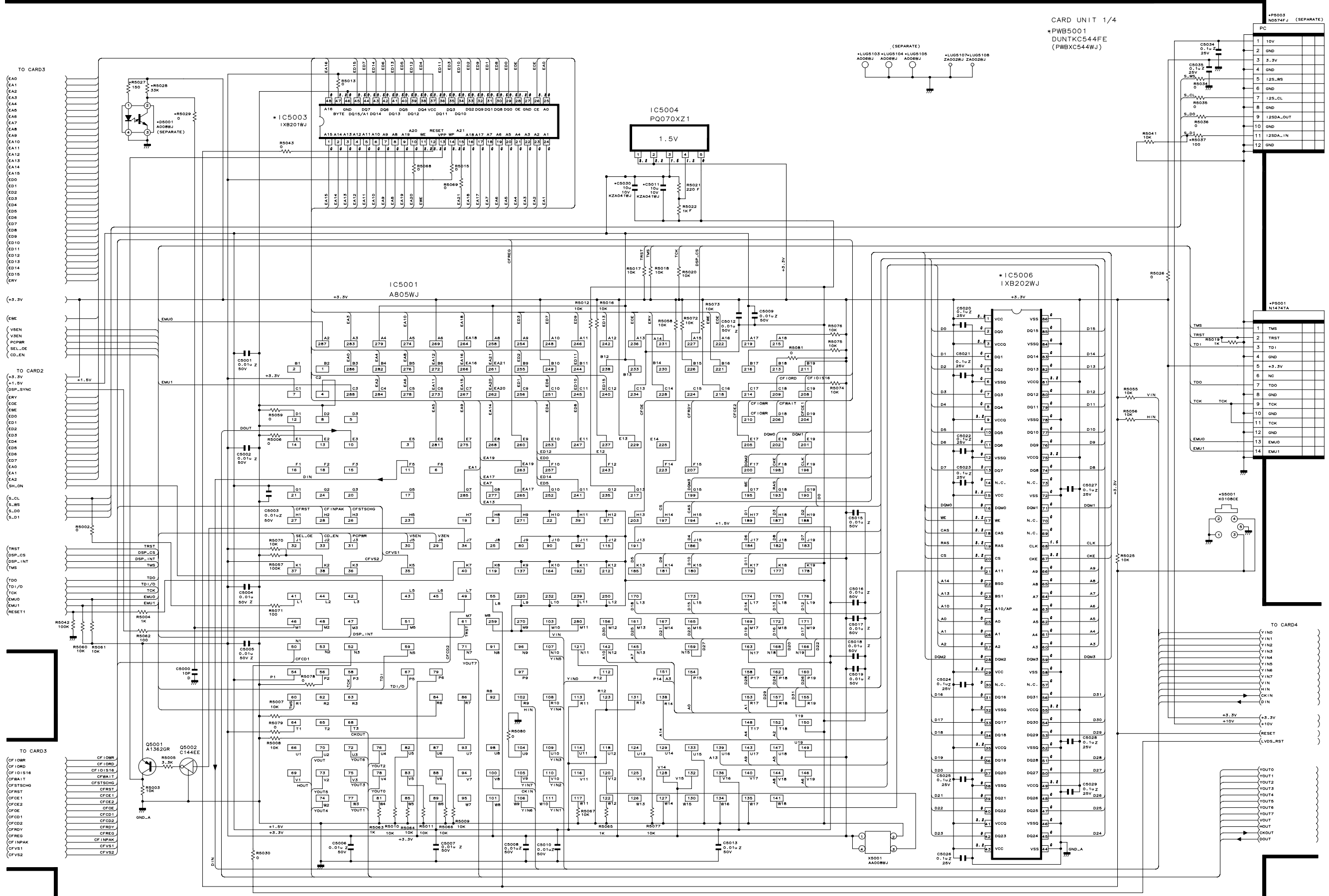
PARTS MARKED WITH "△" (  ) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

**A**



PC CARD Unit-1/4 (AVC)

CARD 1



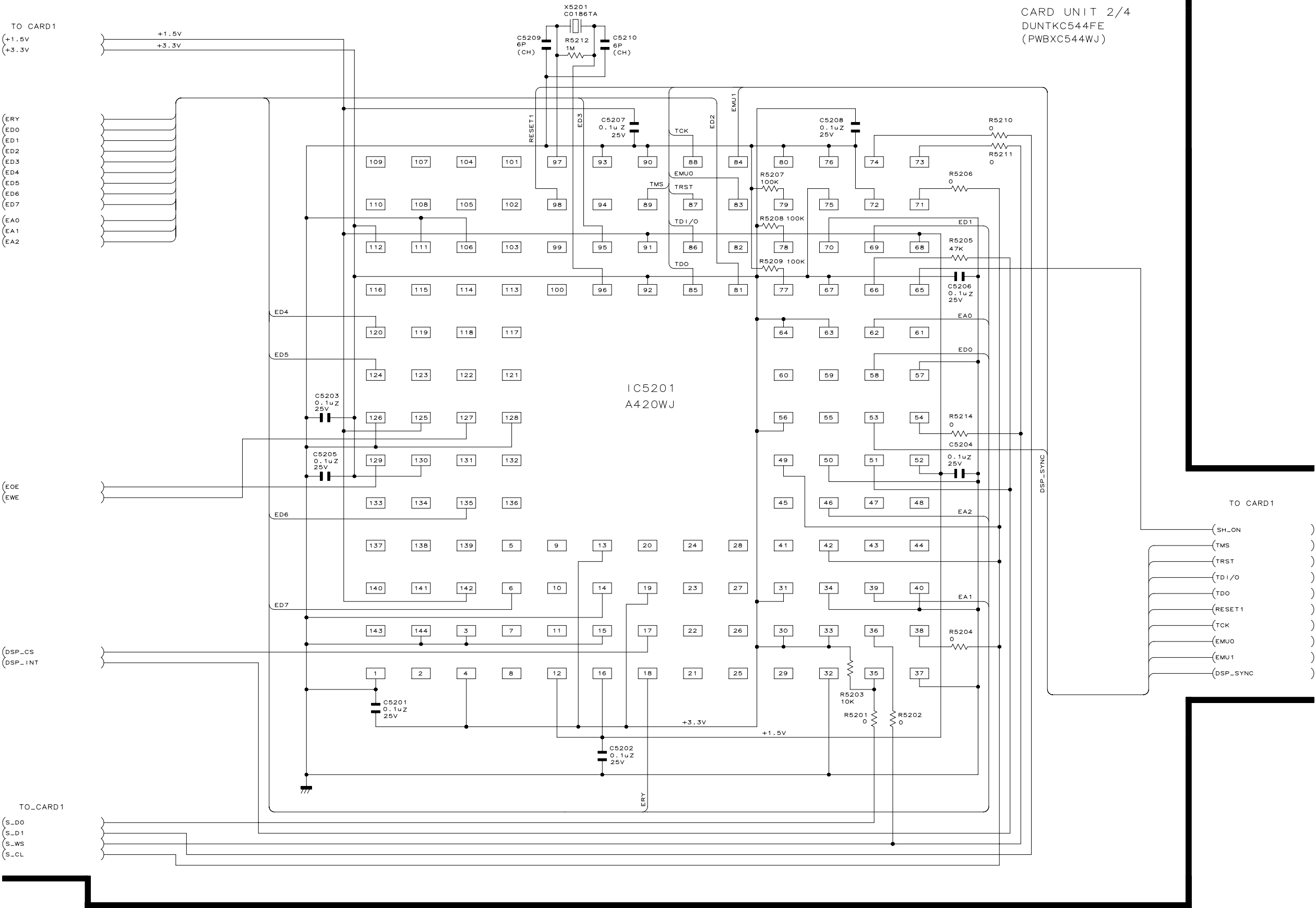
D5

D6

PC CARD Unit-2/4 (AVC)

CARD2

CARD UNIT 2/4  
DUNTKC544FE  
(PWBXC544WJ)



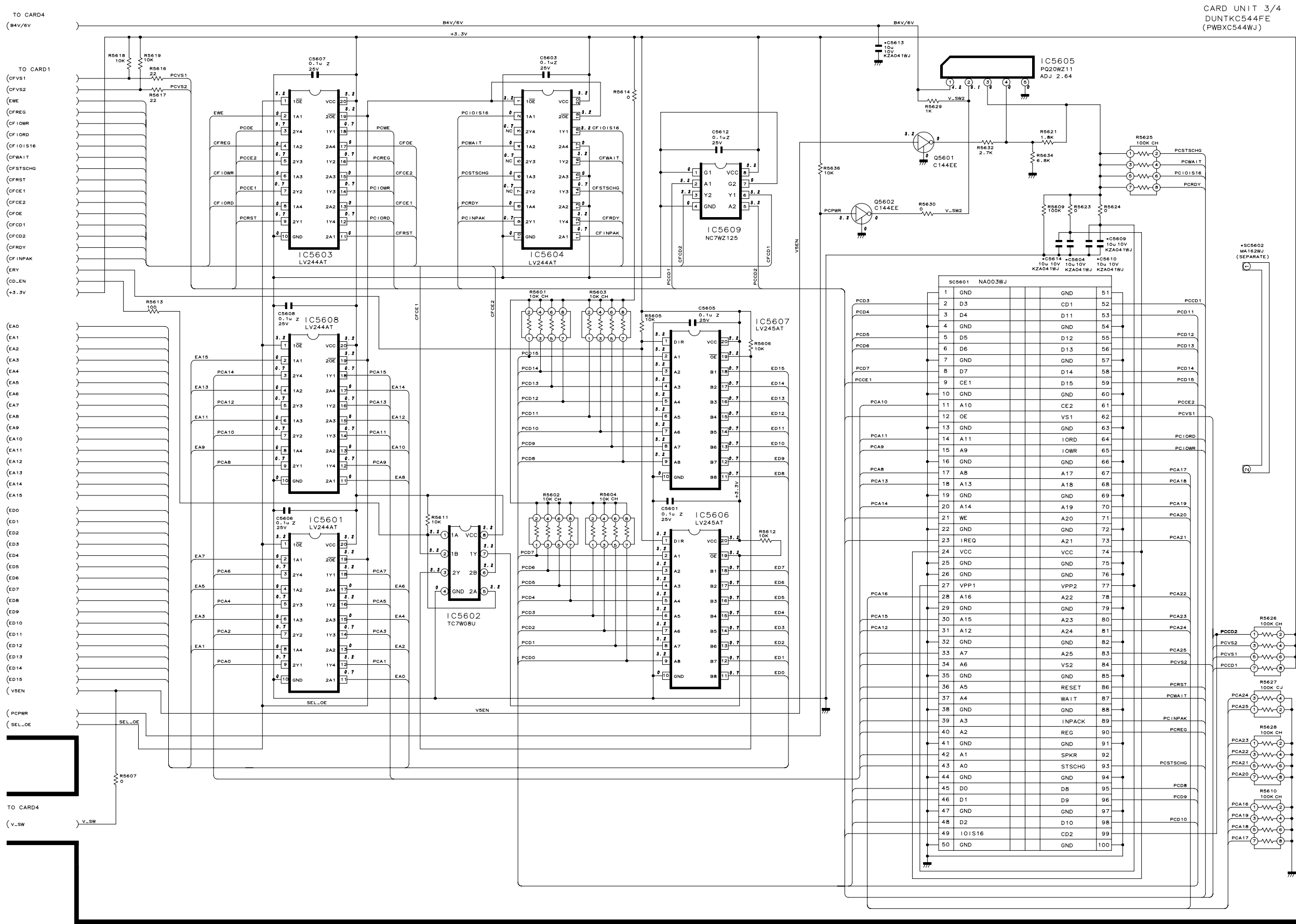
D7

D8



PC CARD Unit-3/4 (AVC)

CARD3



CARD UNIT 3/4  
DUNTKC544FE  
(PWBXC544WJ)

**A**

D12



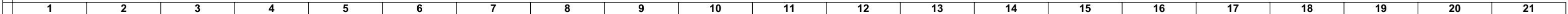
## D13



## D15



1



**A**

004.sh t

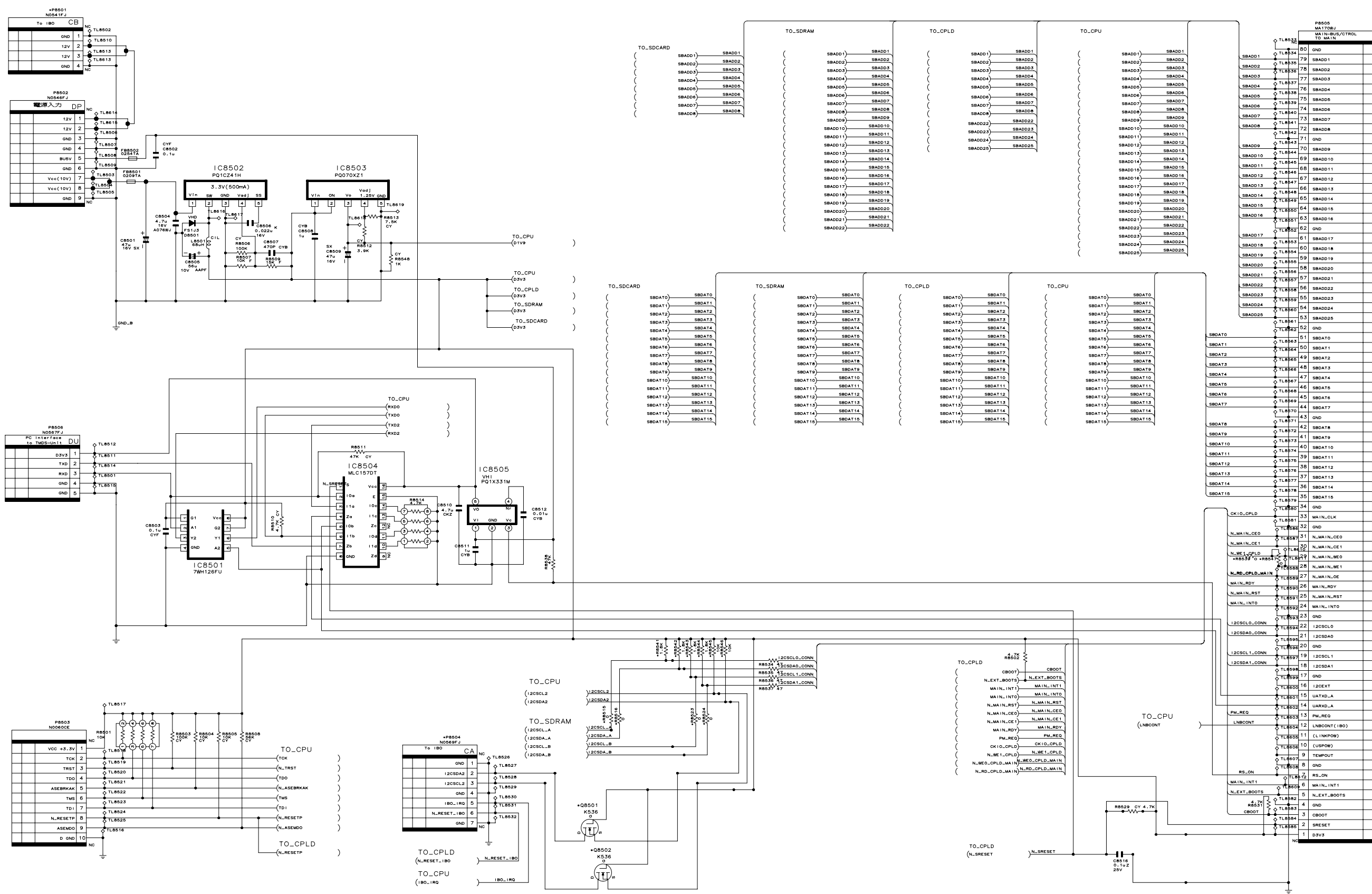
DUNTKC427FE  
QPWBFC427WJZZ

SC8401 ZA050WJ			
SD Card Socket			
1	CD/DAT3 (CS)		
2	CMD (DI)		
3	VSS1		
4	VDD		
5	CLK (SCLK)		
6	VSS2		
7	DAT0 (DO)		
8	DAT1 (RSV)		
9	DAT2 (RSV)		
10	CD		
11	COMMON		
12	WP		

CPU Unit-5/5 (AVC)

CONN KA1 005.sh

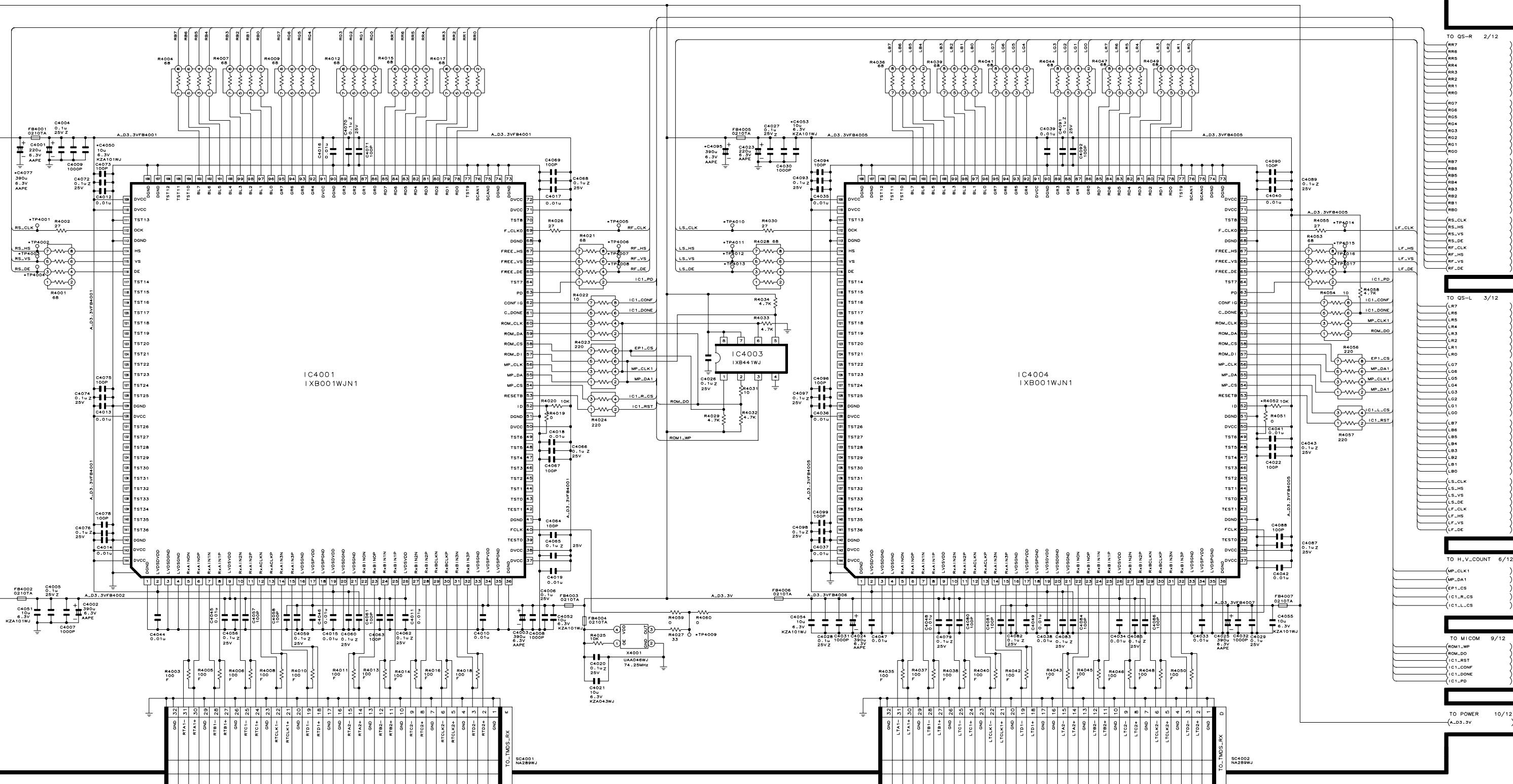
DUNT KC427FE  
QPWBF C427WJZZ



■ TCON TOP Unit-1/12 (DISPLAY)

TCON\_TOP 1/12 (GAMMA\_R/L)

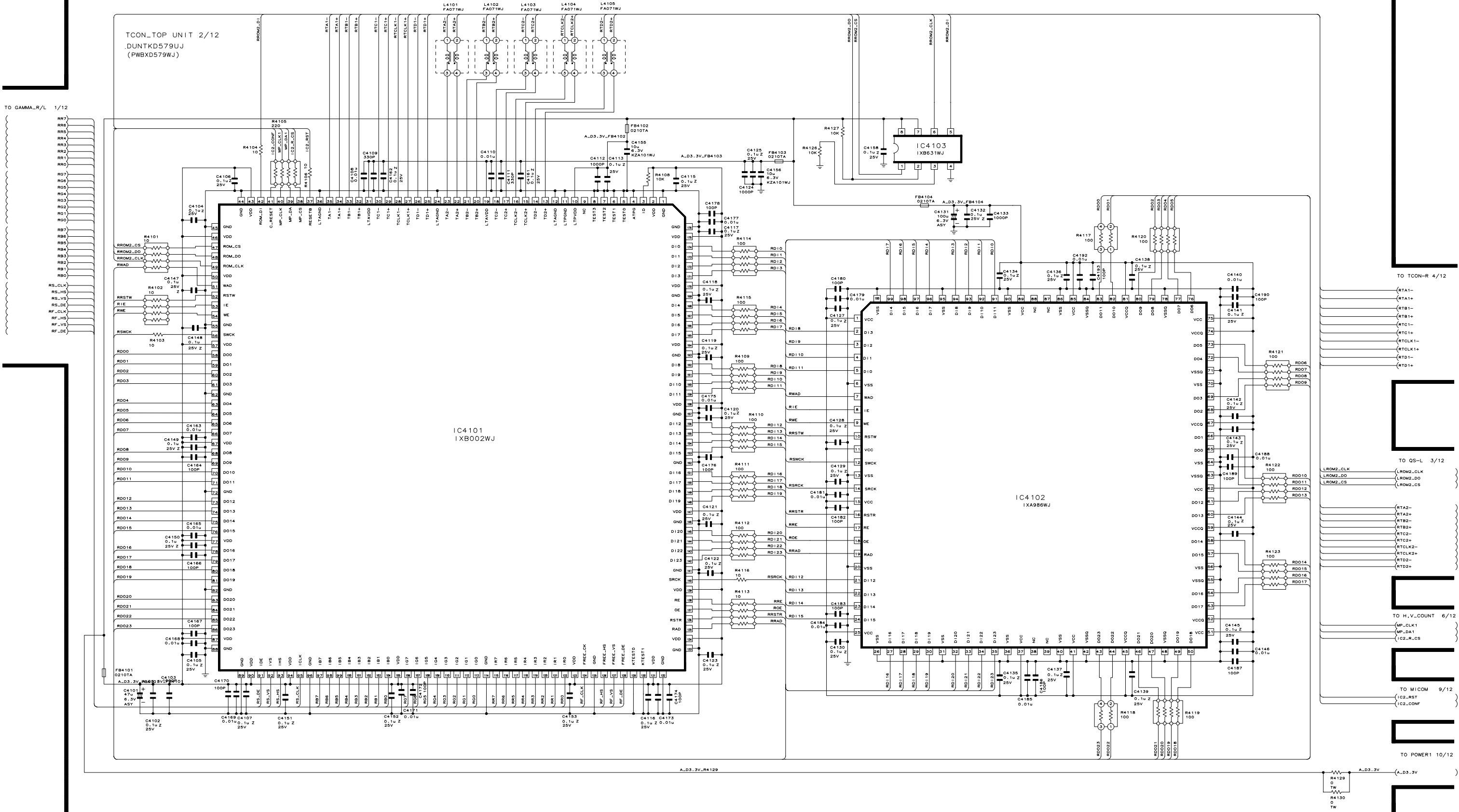
TCON\_TOP UNIT 1/12  
DUNTKD579UJ  
(PWBXD579WJ)





■TCON TOP Unit-2/12 (DISPLAY)

TCON\_TOP 2/12 (QS-R)



D25

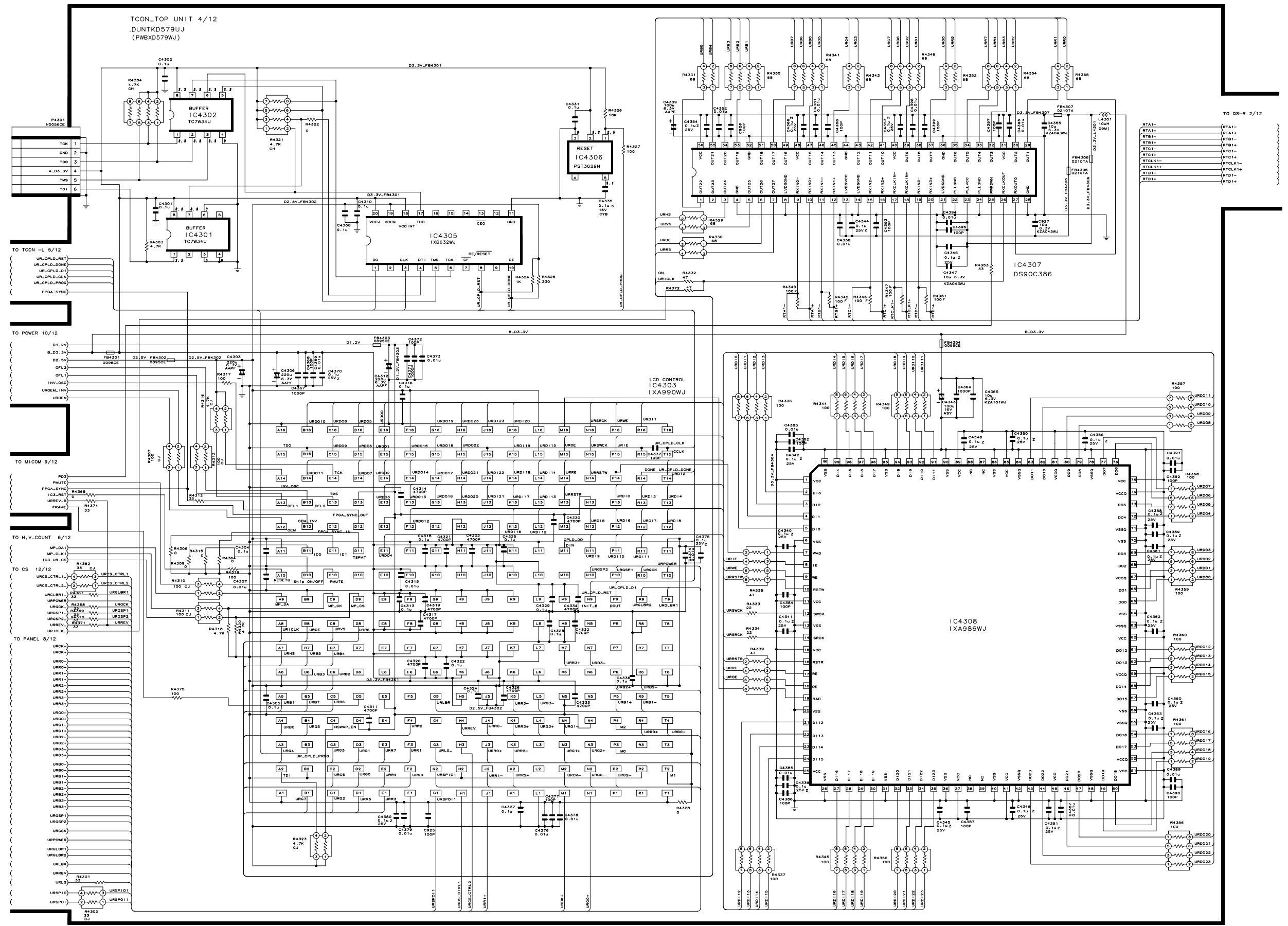
D26

## TCON\_TOP 3/12 (QS-L)



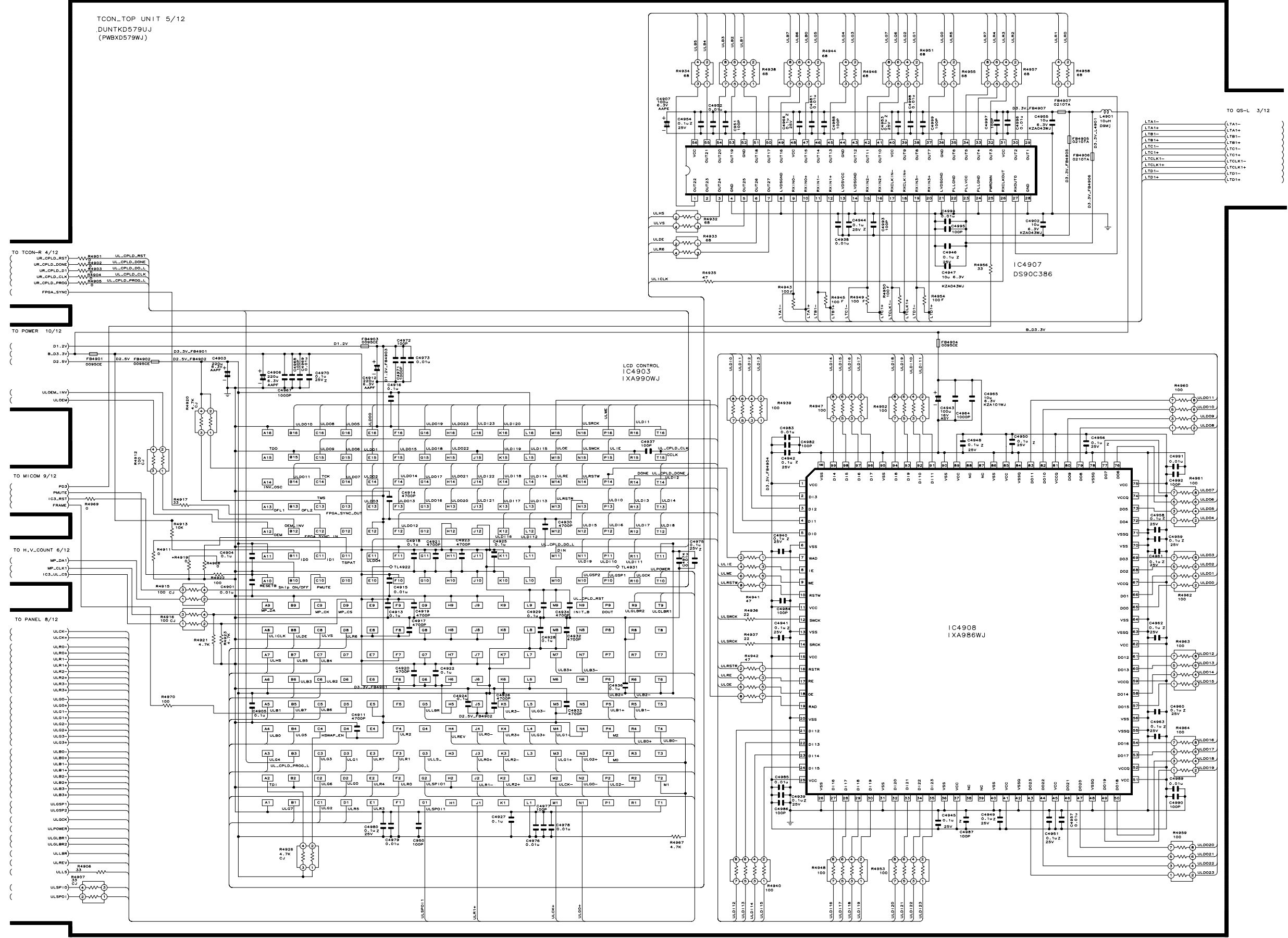
■TCON TOP Unit-4/12 (DISPLAY)

TCON\_TOP 4/12 (TCON-R)



■TCON TOP Unit-5/12 (DISPLAY)

TCON\_TOP 5/12 (TCON-L)

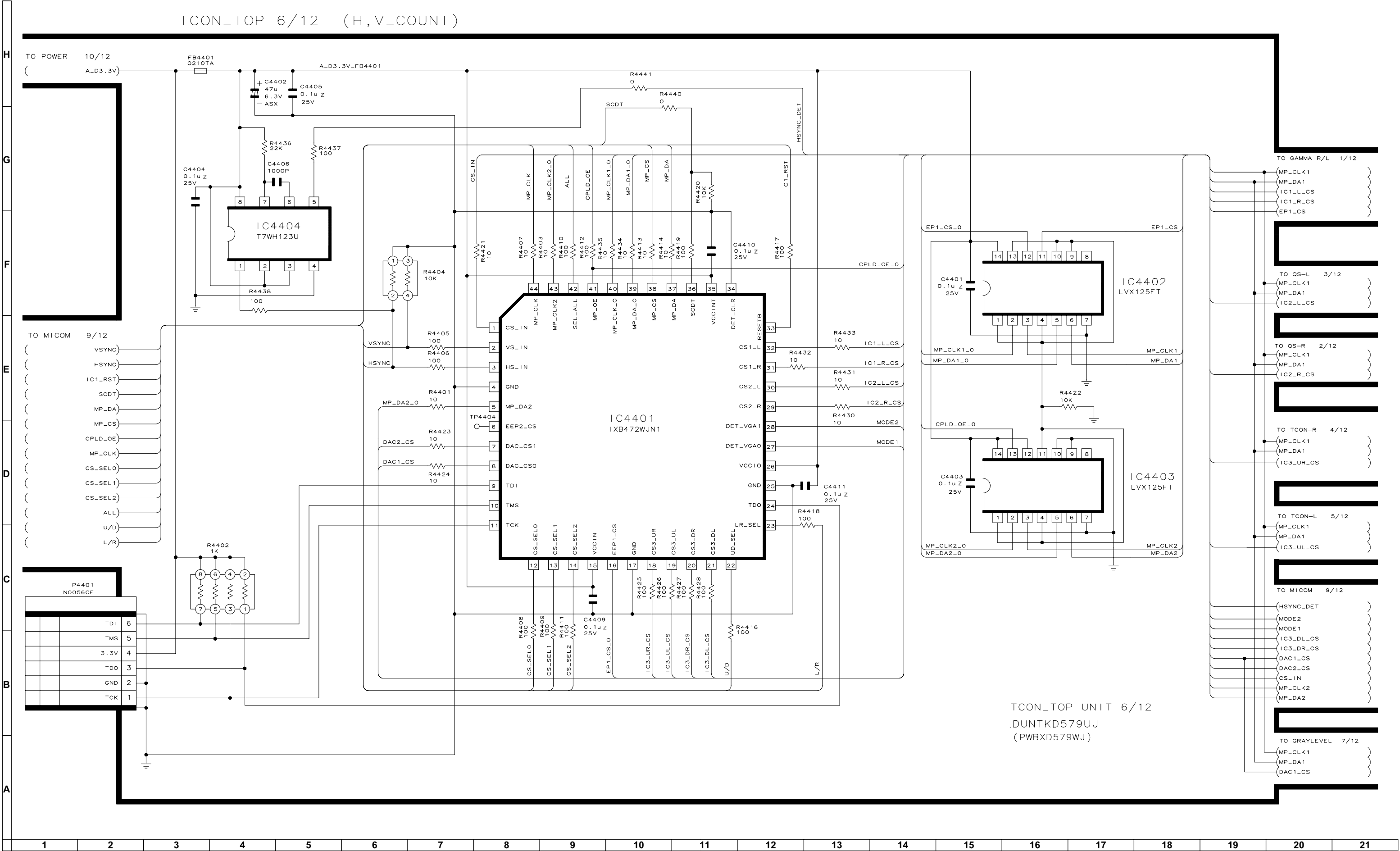


D31

D32

■TCON TOP Unit-6/12 (DISPLAY)

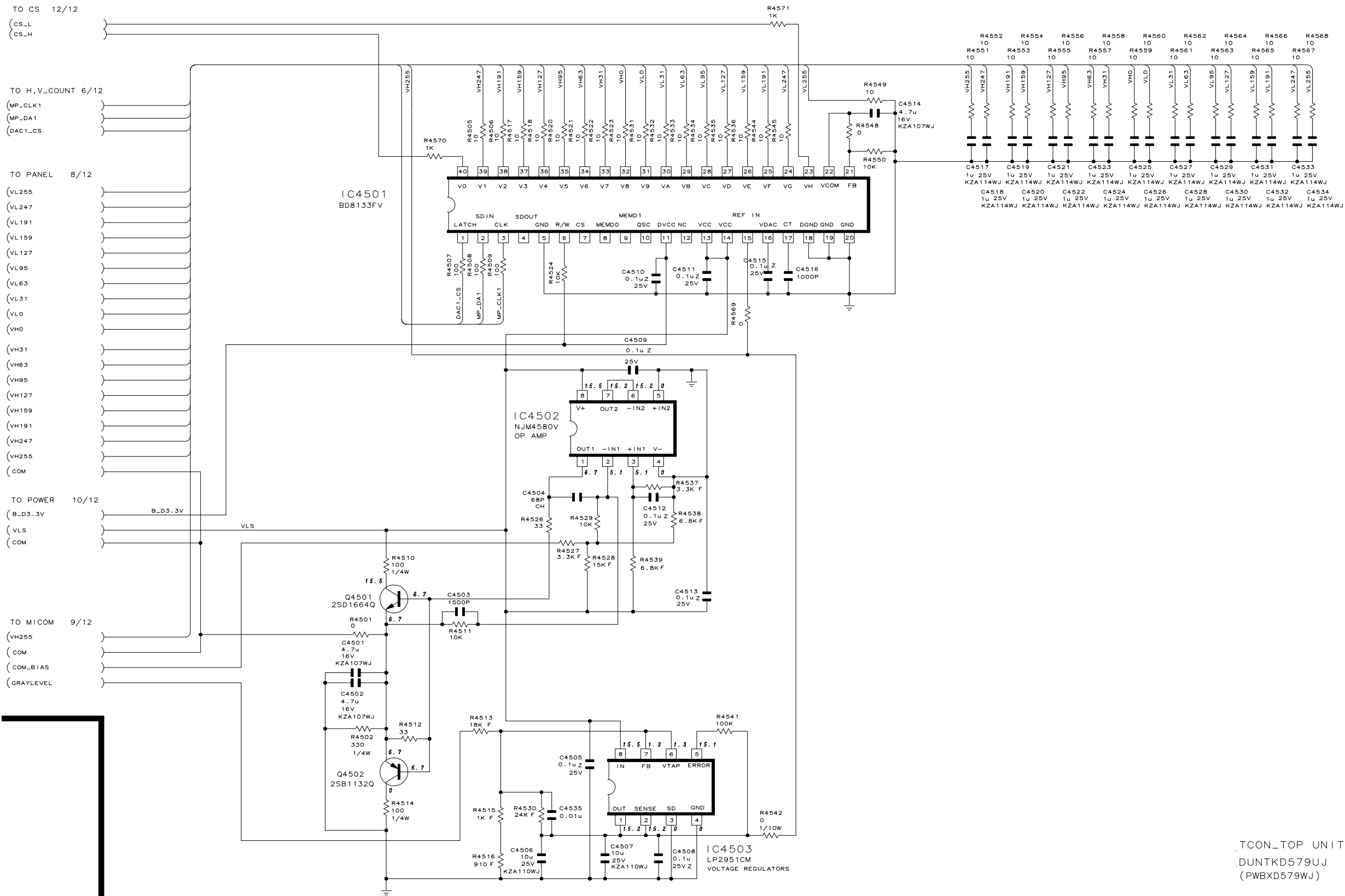
TCON\_TOP 6/12 (H,V\_COUNT)



TCON\_TOP UNIT 6/12  
.DUNTKD579UJ  
(PWBXD579WJ)

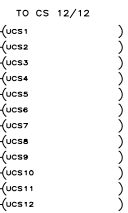
■TCON TOP Unit-7/12 (DISPLAY)

TCON\_TOP 7/12 (GRAYLEVEL)



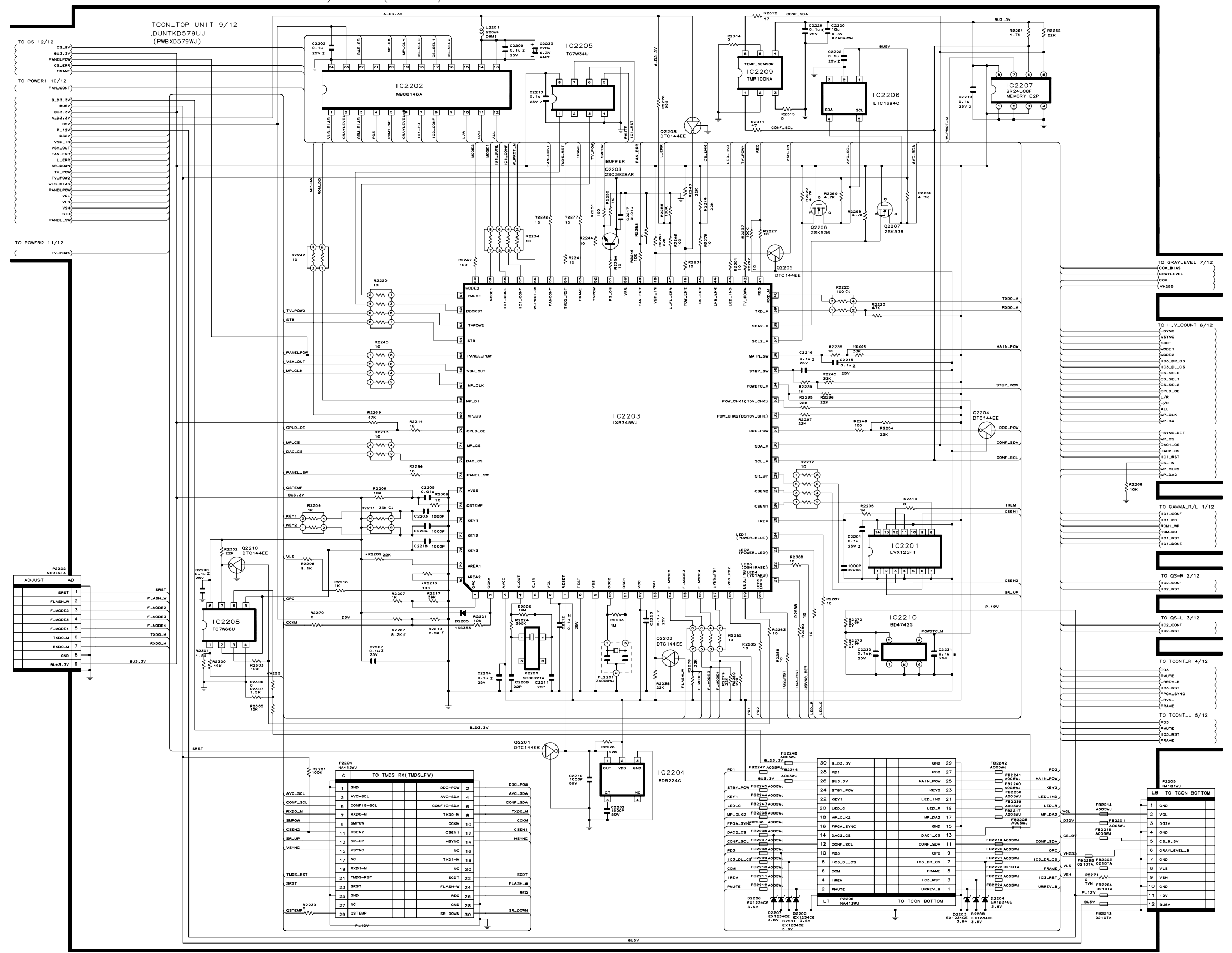
TCON\_TOP UNIT 7/12  
.DUNTKD579UJ  
(PWBXD579WJ)

**A**



■ TCON TOP Unit-9/12 (DISPLAY)

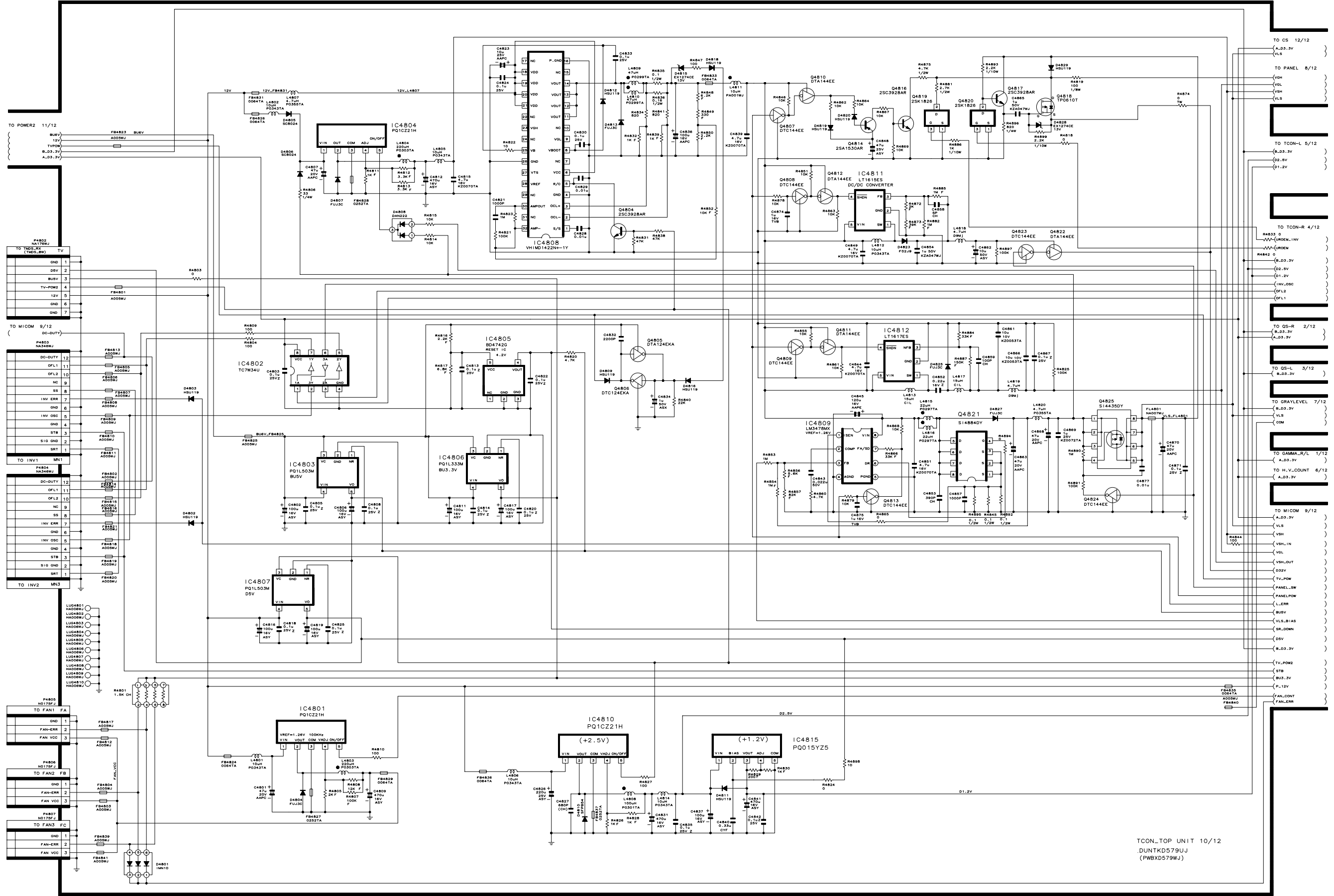
TCON\_TOP 9/12 (MICOM)





■TCON TOP Unit-10/12 (DISPLAY)

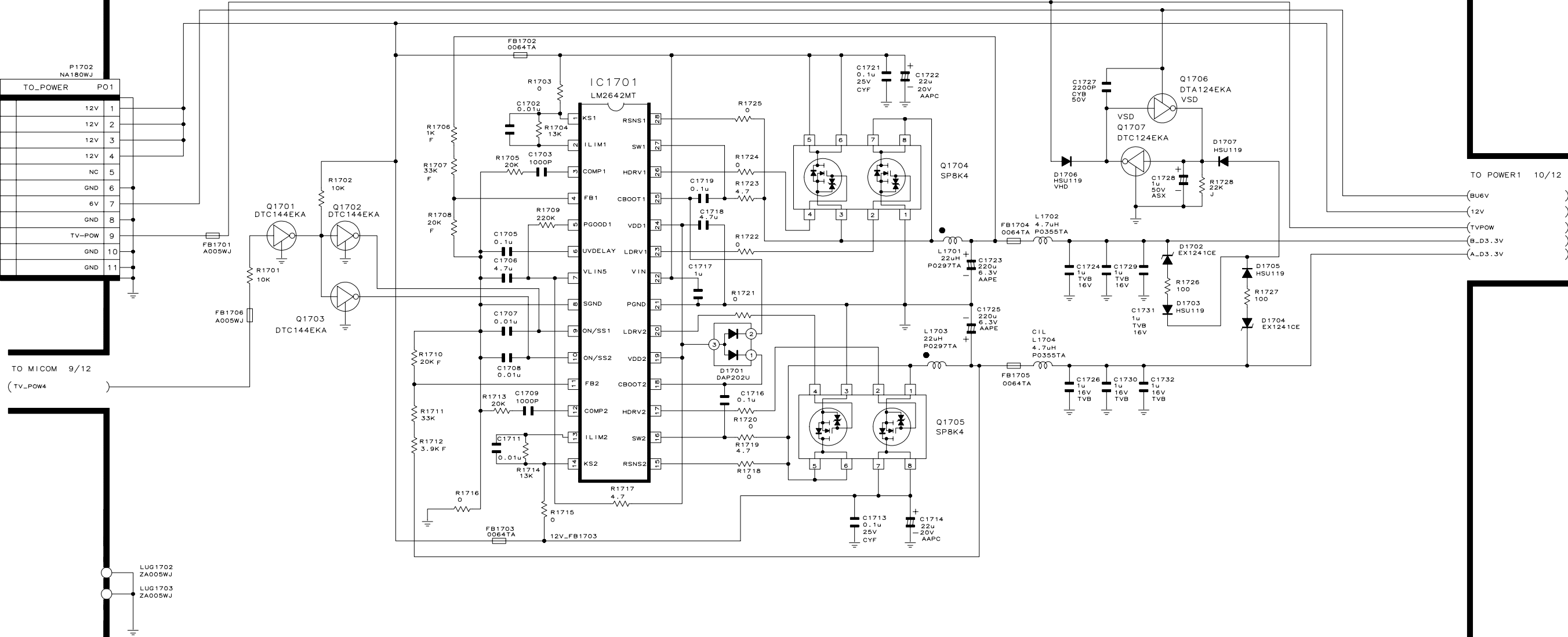
TCON\_TOP 10/12 (POWER1)



TCON\_TOP UNIT 10/12  
DUNTKD579UJ  
(PWBXD579WU)

■TCON TOP Unit-11/12 (DISPLAY)

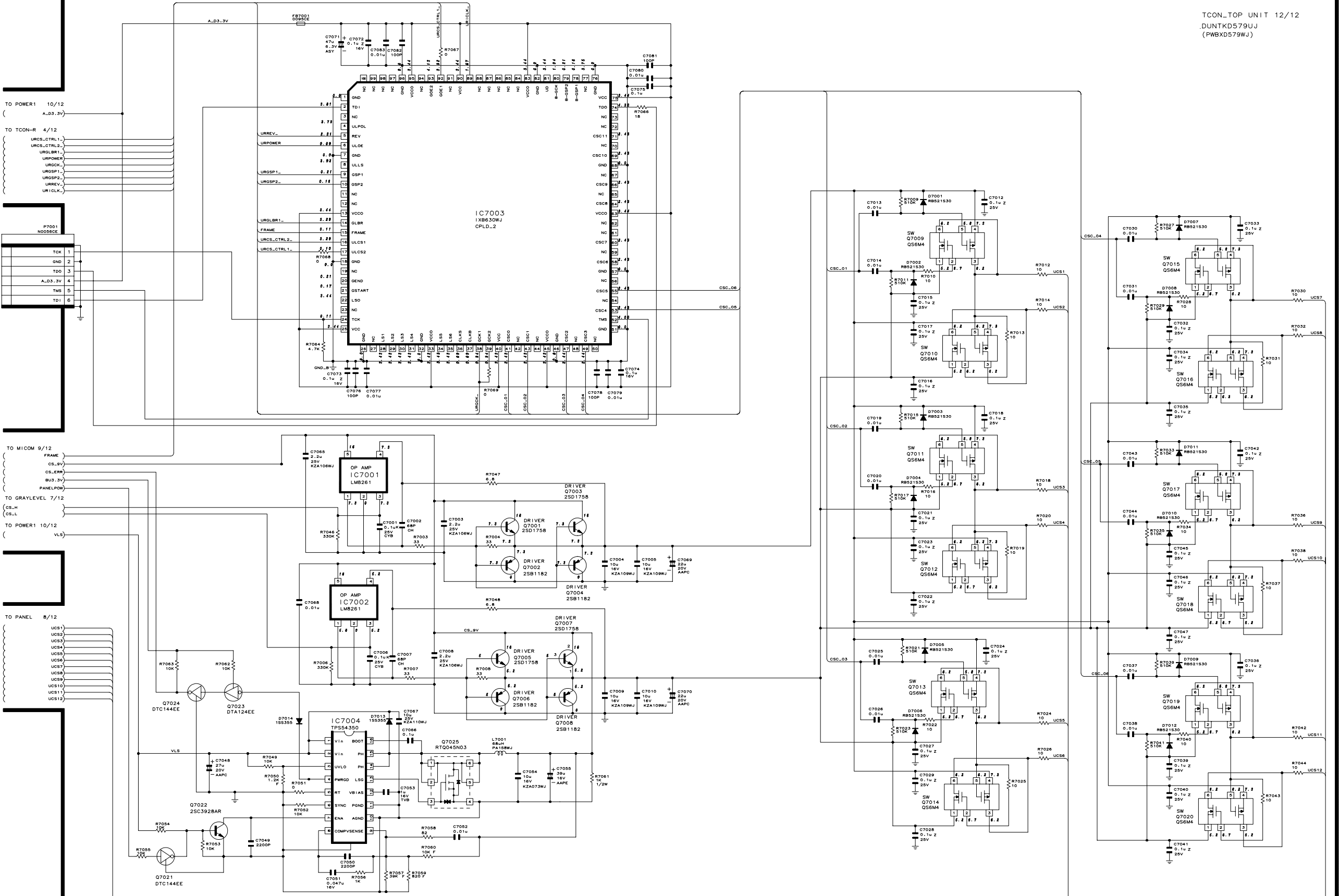
TCON\_TOP 11/12 (POWER2)



TCON\_TOP UNIT 11/12  
.DUNTKD579UJ  
(PWBXD579WJ)

■TCON TOP Unit-12/12 (DISPLAY)

TCON\_TOP 12/12 (CS)



TCON\_TOP UNIT 12/12  
.DUNKD579UJ  
(PWBX0579WJ)

TCON BOTTOM-R 1/6 (TCON\_R)



TCON\_BOTTOM 2/6 (TCON\_L)

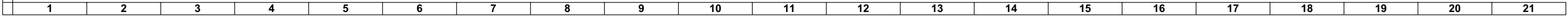


A	B	C	D	E	F	G	H
---	---	---	---	---	---	---	---

[illegible]

TCON\_BOTTOM UNIT 3/6  
\_DUNTKD580UJ  
(PWBXD580WJ)

<b>A</b>	
<b>B</b>	
<b>C</b>	
<b>D</b>	
<b>E</b>	
<b>F</b>	
<b>G</b>	
<b>H</b>	



# D55

## D56

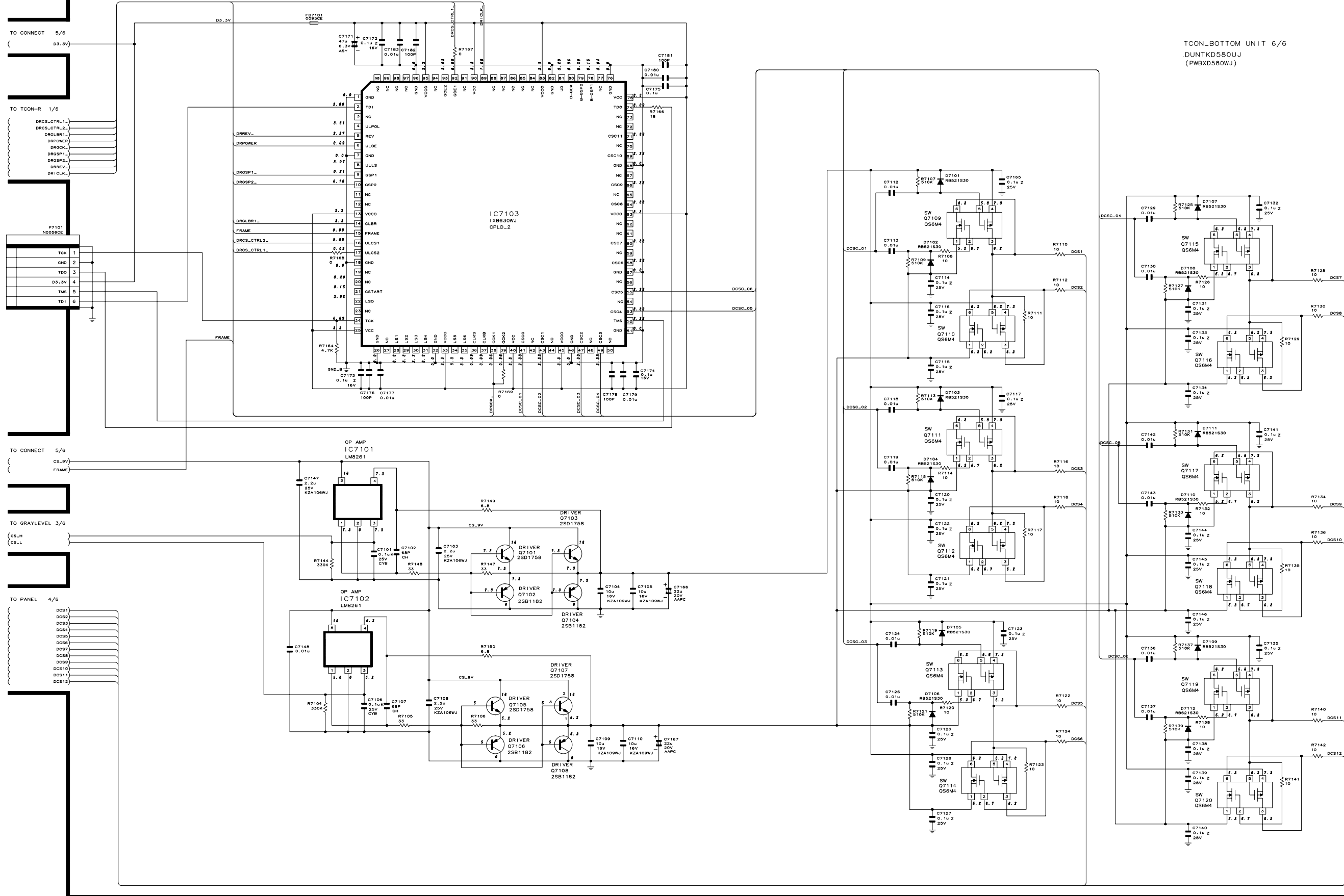


---



■TCON BOTTOM Unit-6/6 (DISPLAY)

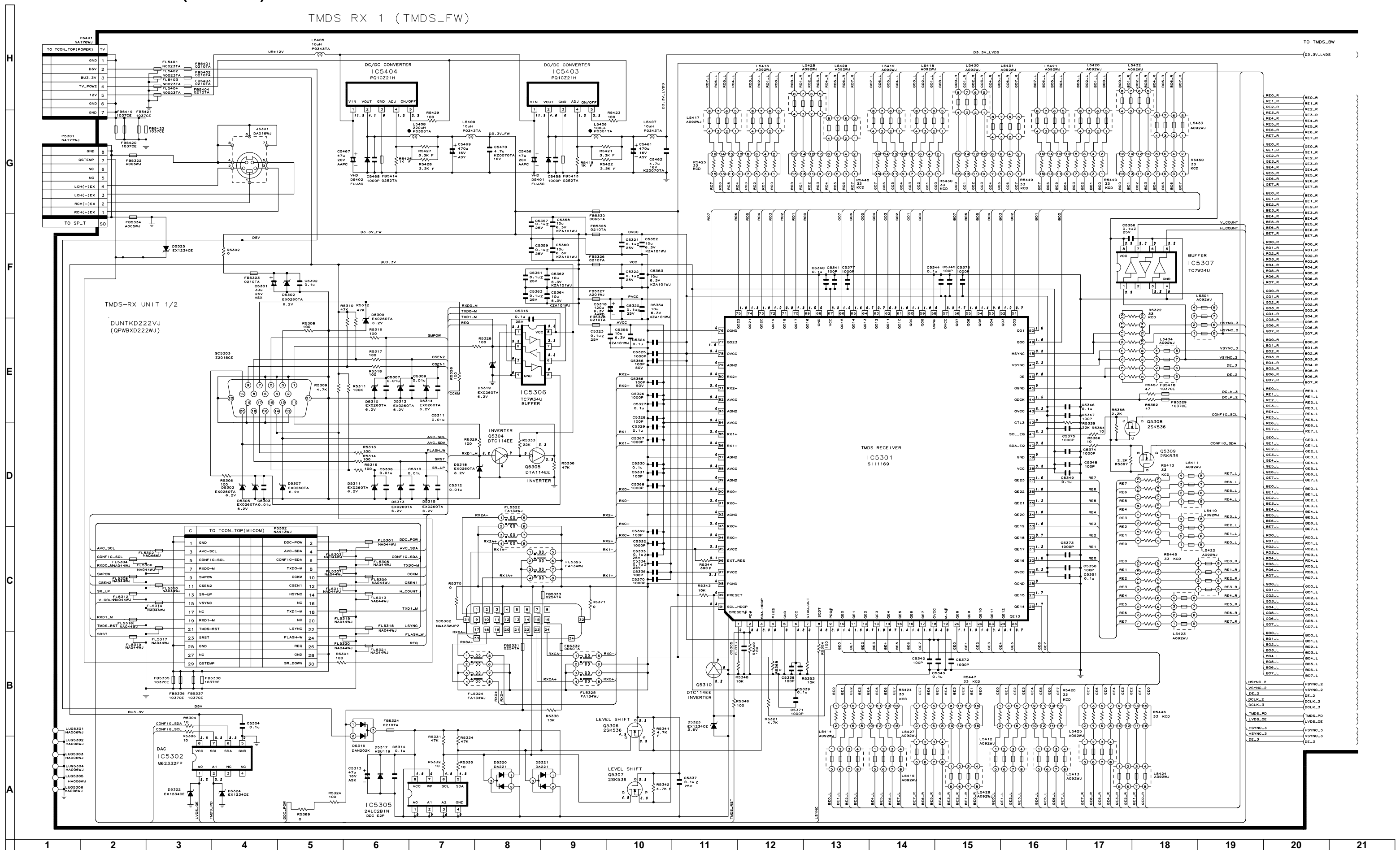
TCON\_BOTTOM 6/6 (CS)



TCON\_BOTTOM UNIT 6/6  
.DUNTKD580UJ  
(PWBXD580WJ)

■TMD5-RX Unit-1/2 (DISPLAY)

TMD5 RX 1 (TMD5\_FW)



■TMD5-RX Unit-2/2 (DISPLAY)

H

G

F

E

D

C

B

A

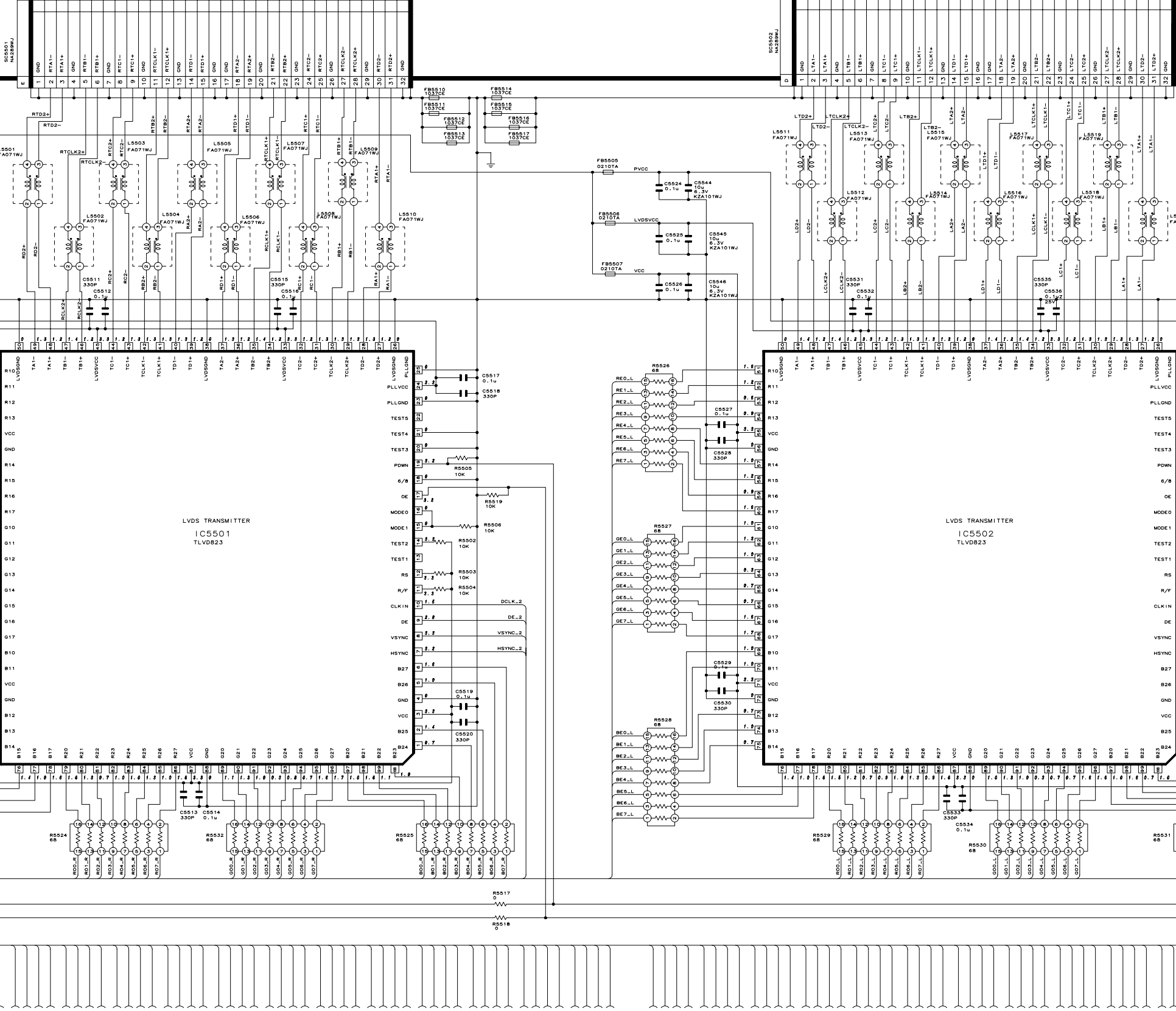
TMD5 RX 2 (LVDS\_TX)

TMD5-RX UNIT 2/2

DUNT0D222VJ  
(QPWBXD222WJ)

LVDS TRANSMITTER  
IC5501  
TLVD823

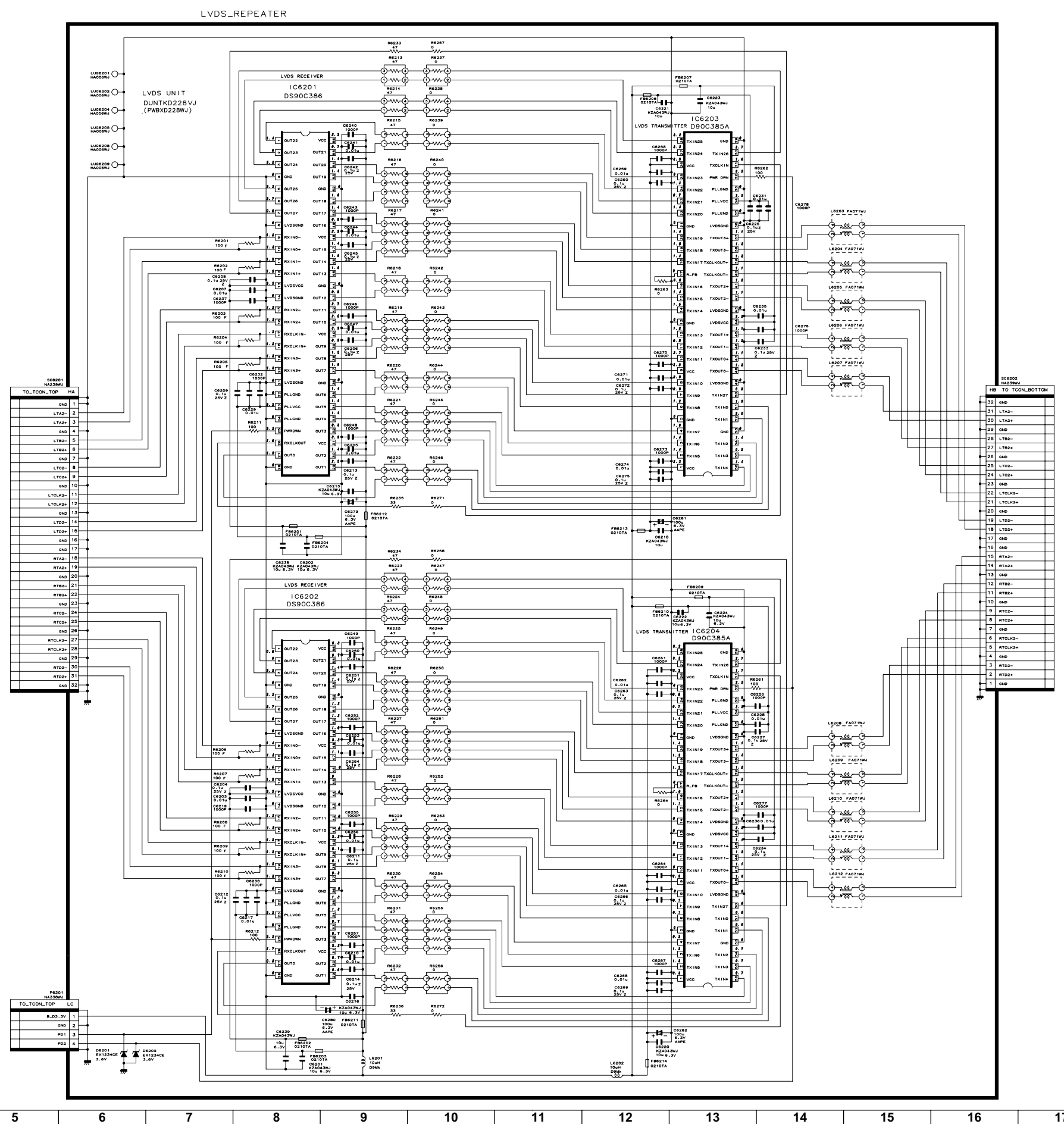
LVDS TRANSMITTER  
IC5502  
TLVD823



D61

D62

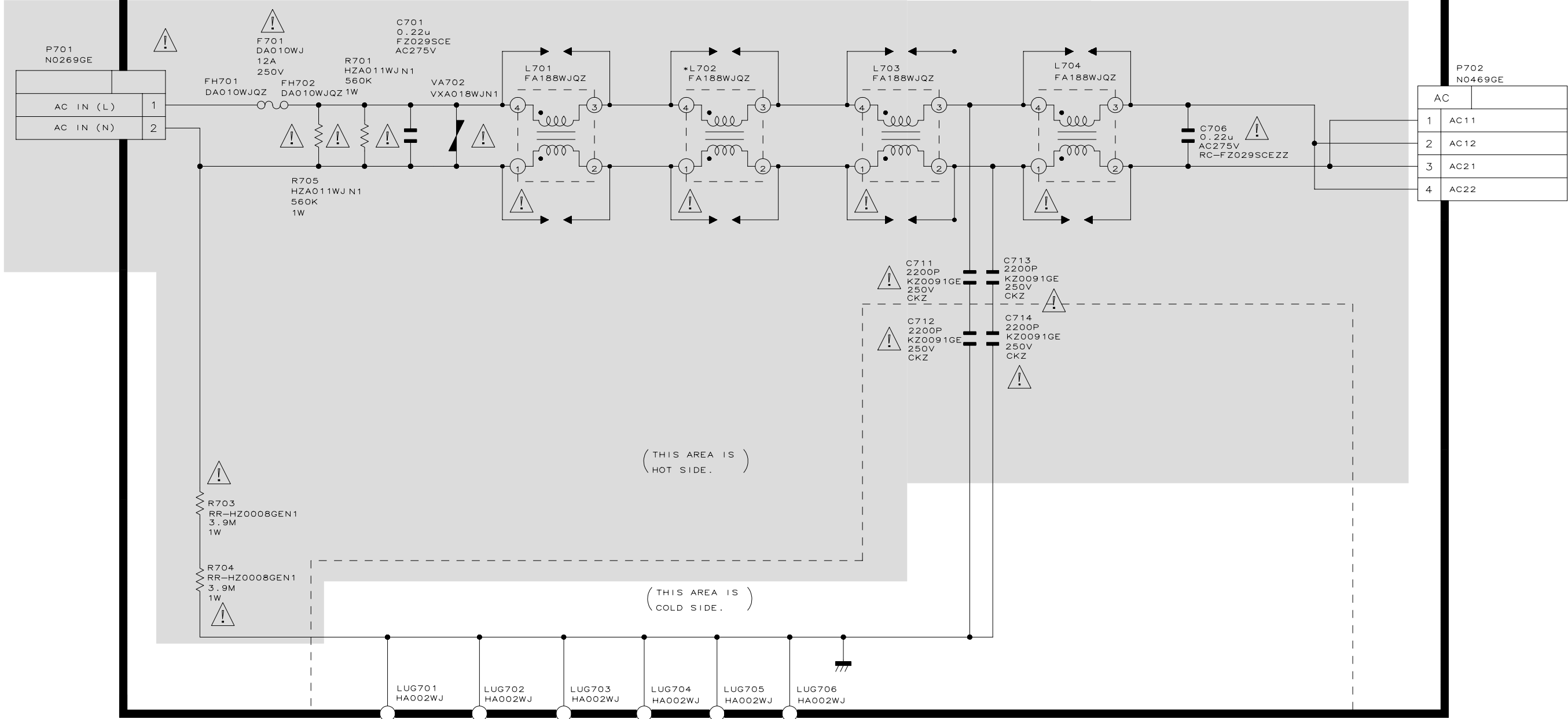
**D63**



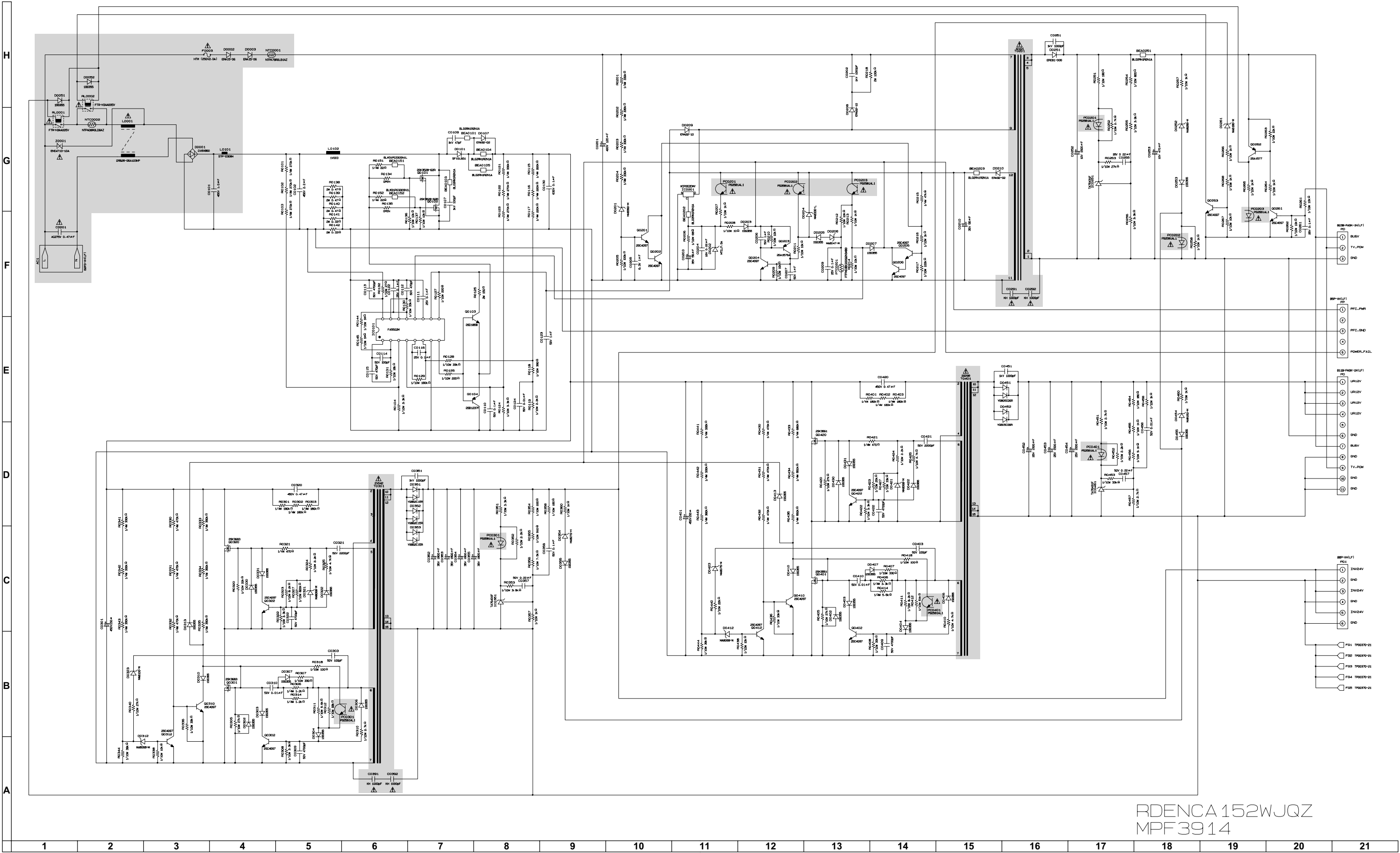
LINE FILTER Unit (DISPLAY)

LINEFILTER

LINEFILTER UNIT  
DUNTKD226UJ  
(QPWBSD226WJ)

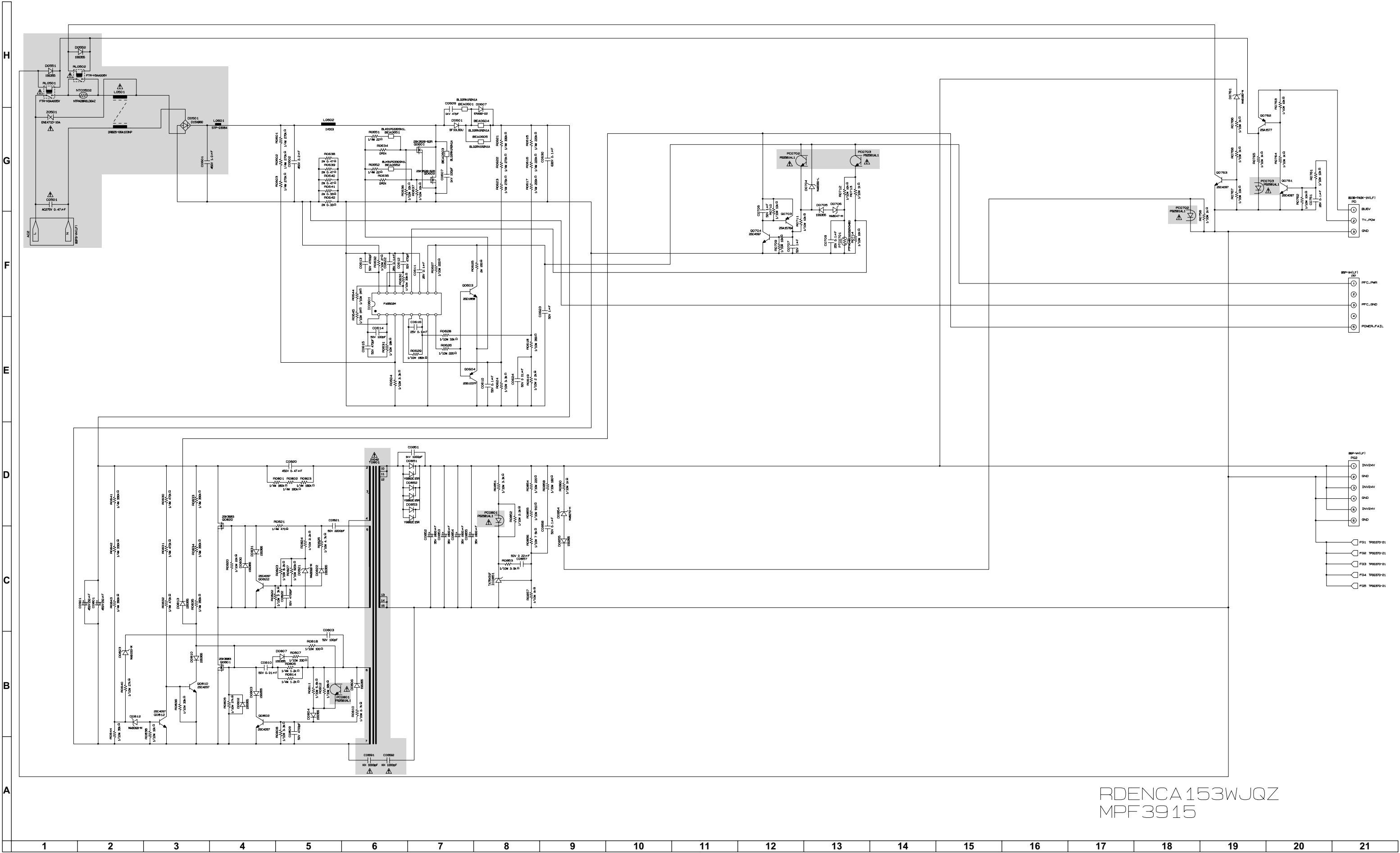


MAIN POWER Unit (DISPLAY)



RDENCA 152WJQZ  
MPF3914

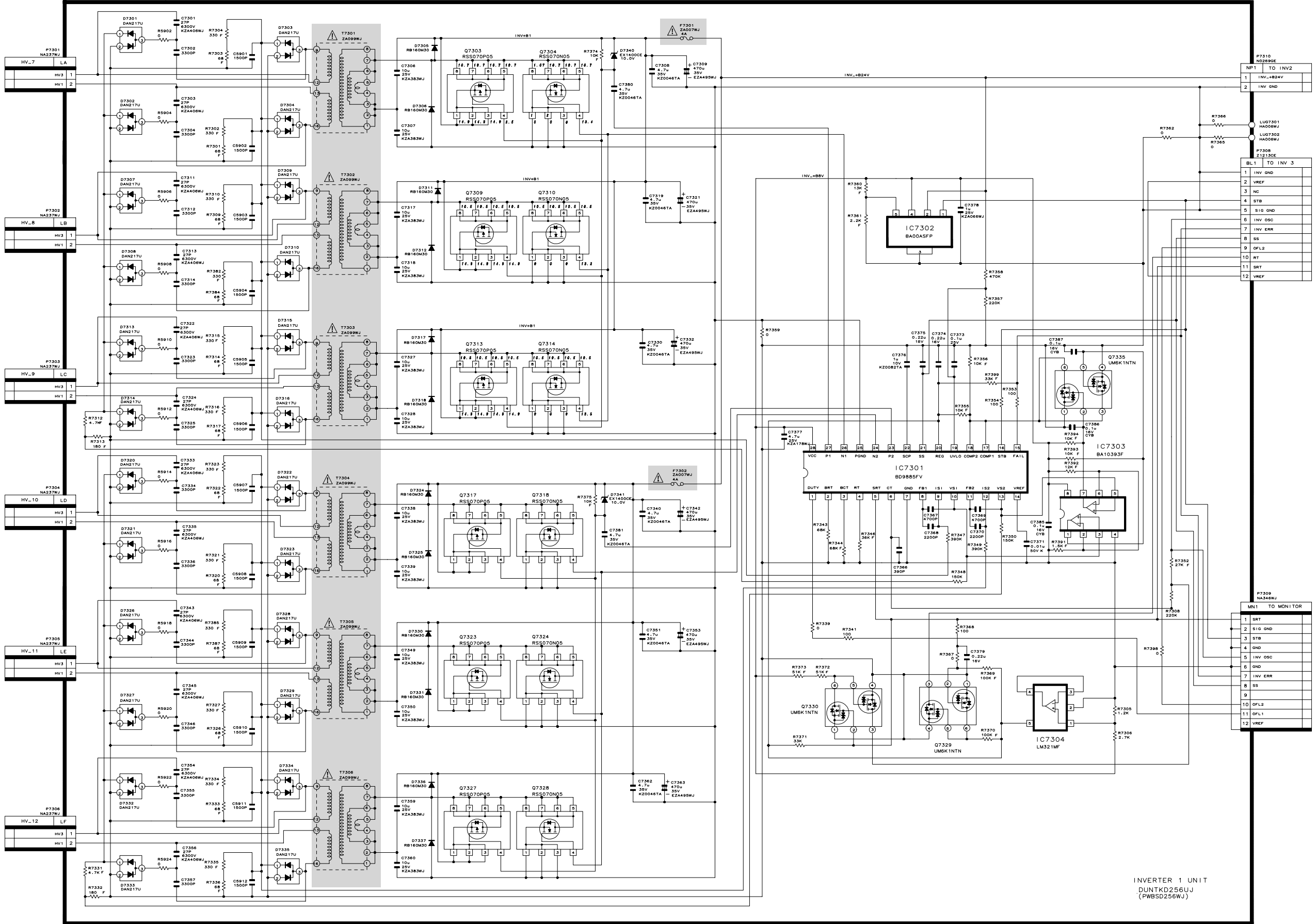
SUB POWER Unit (DISPLAY)



RDENCA153WJQZ  
MPF3915

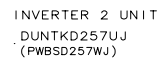
INVERTER-1 Unit (DISPLAY)

INVERTER 1



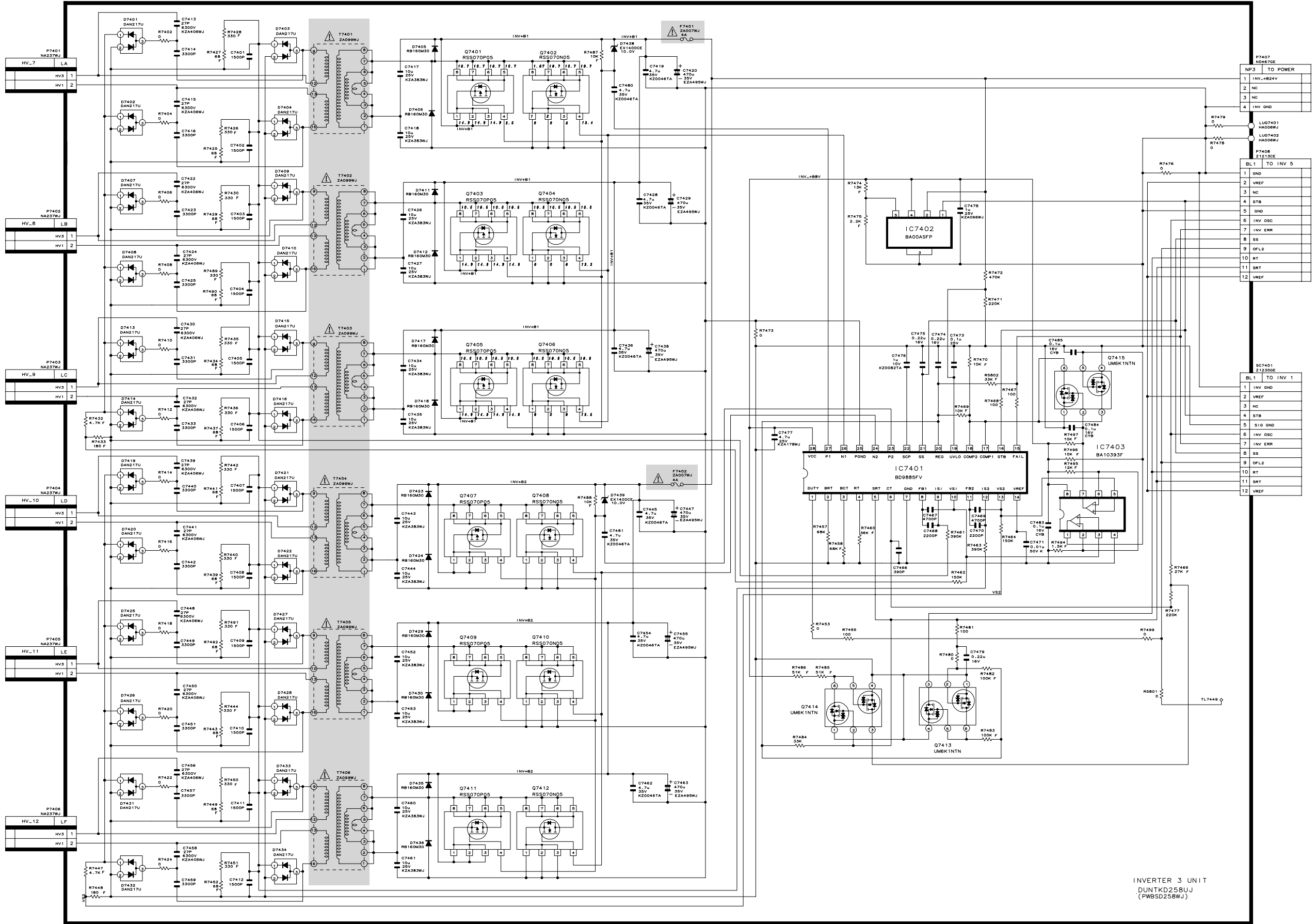


## INVERTER 2



INVERTER-3 Unit (DISPLAY)

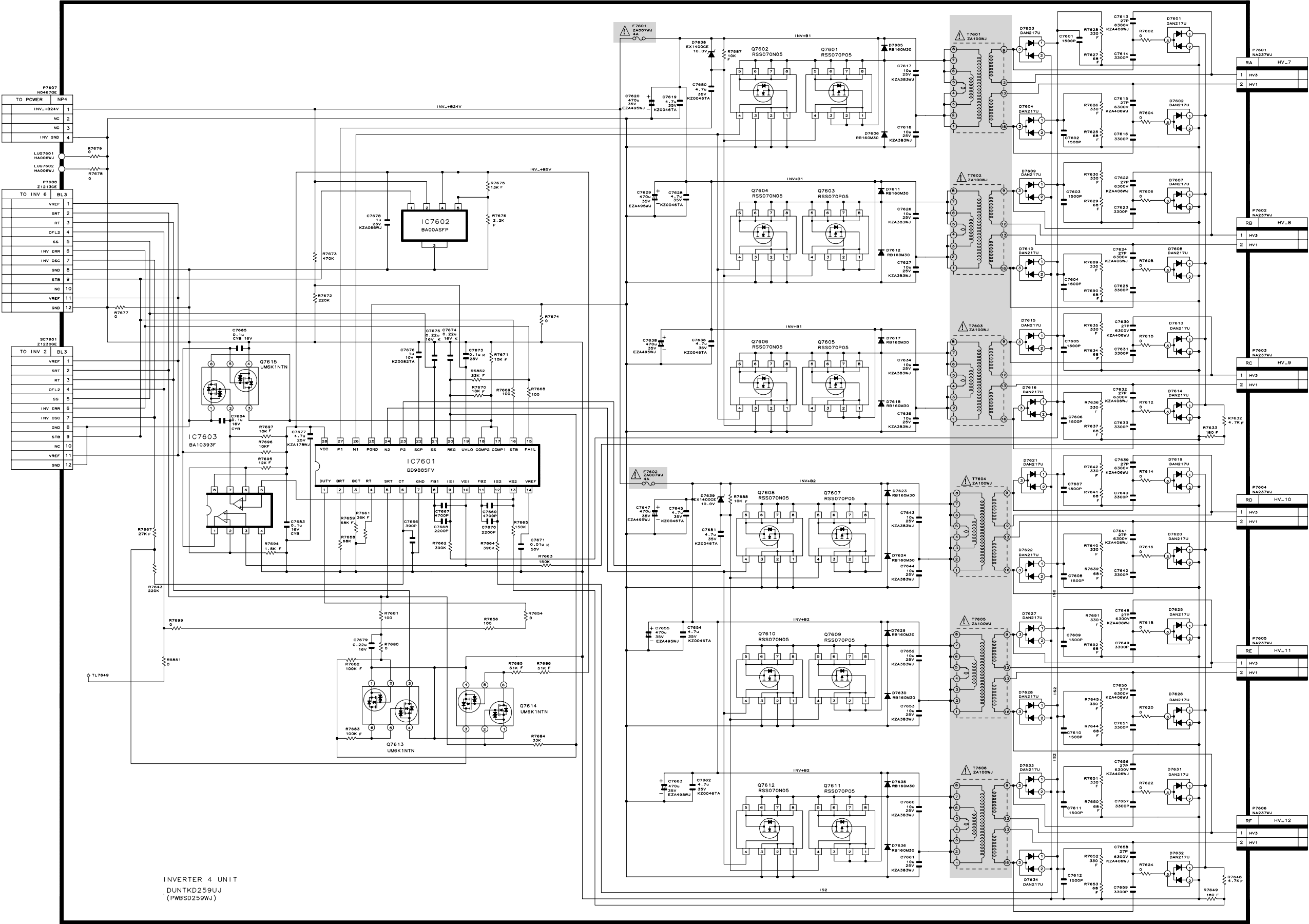
INVERTER 3



INVERTER 3 UNIT  
DUNTKD258UJ  
(PWBSD258WJ)

INVERTER-4 Unit (DISPLAY)

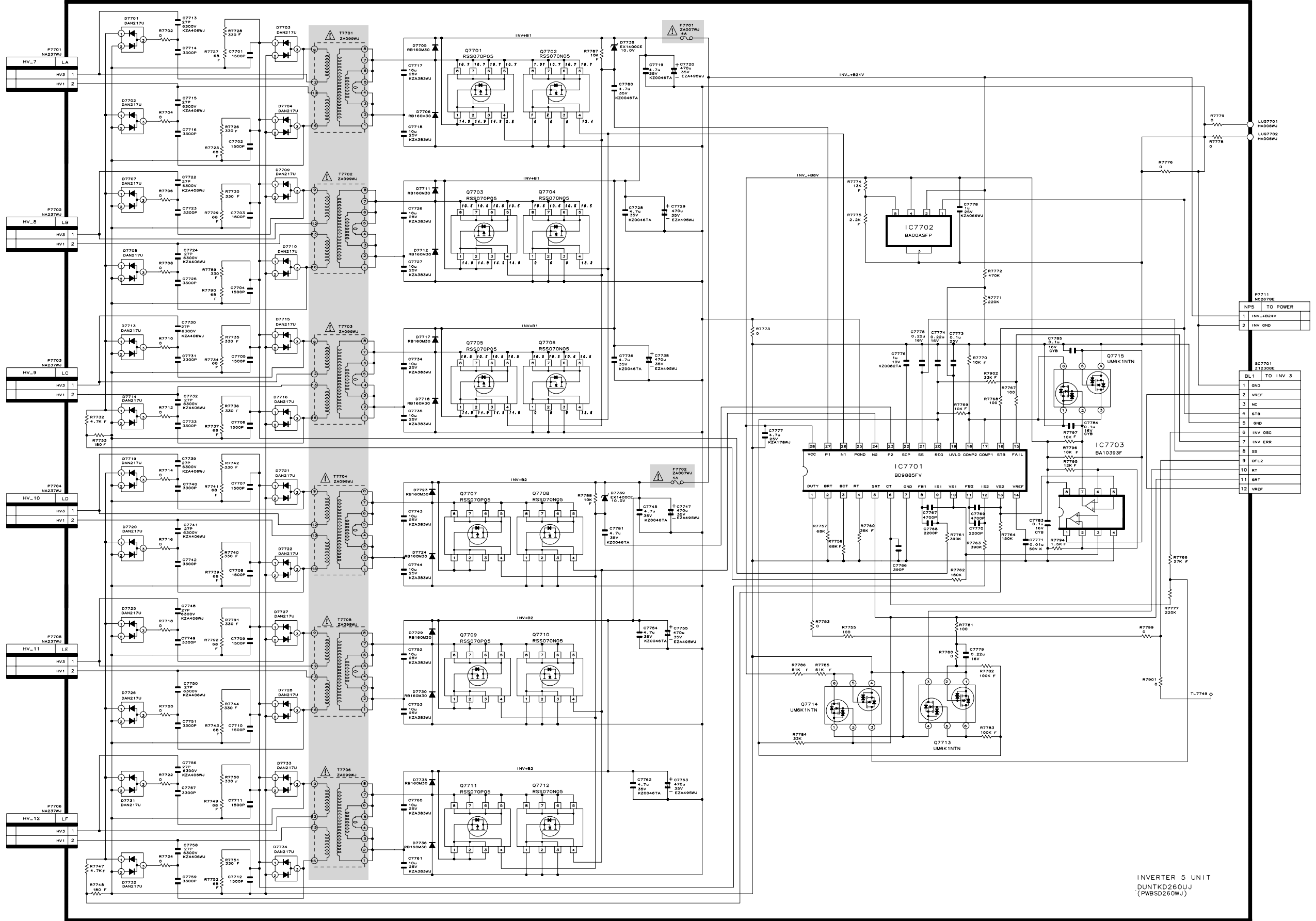
INVERTER 4



INVERTER 4 UNIT  
DUNTKD259UJ  
(PWBSD259WJ)

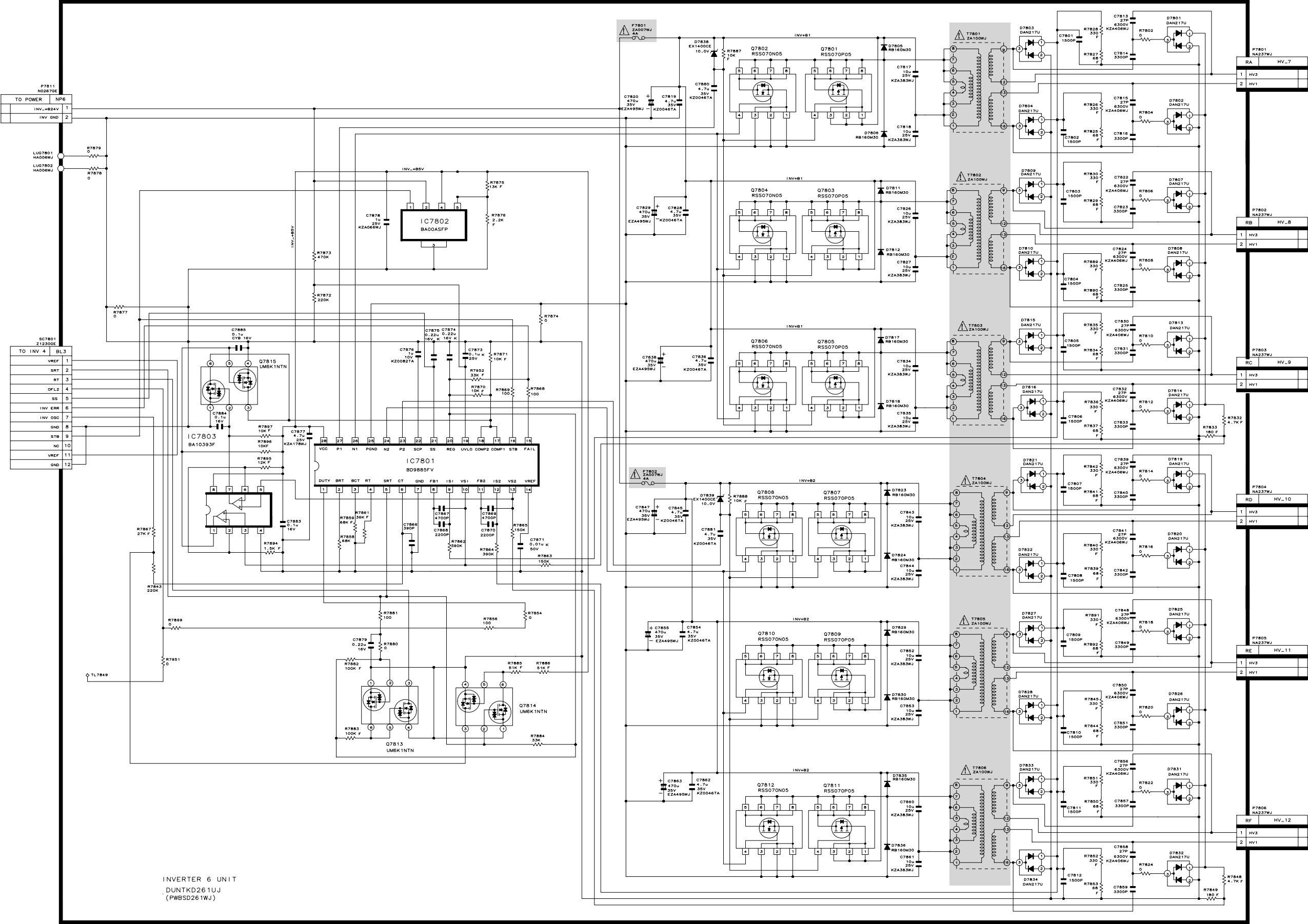
INVERTER-5 Unit (DISPLAY)

INVERTER 5

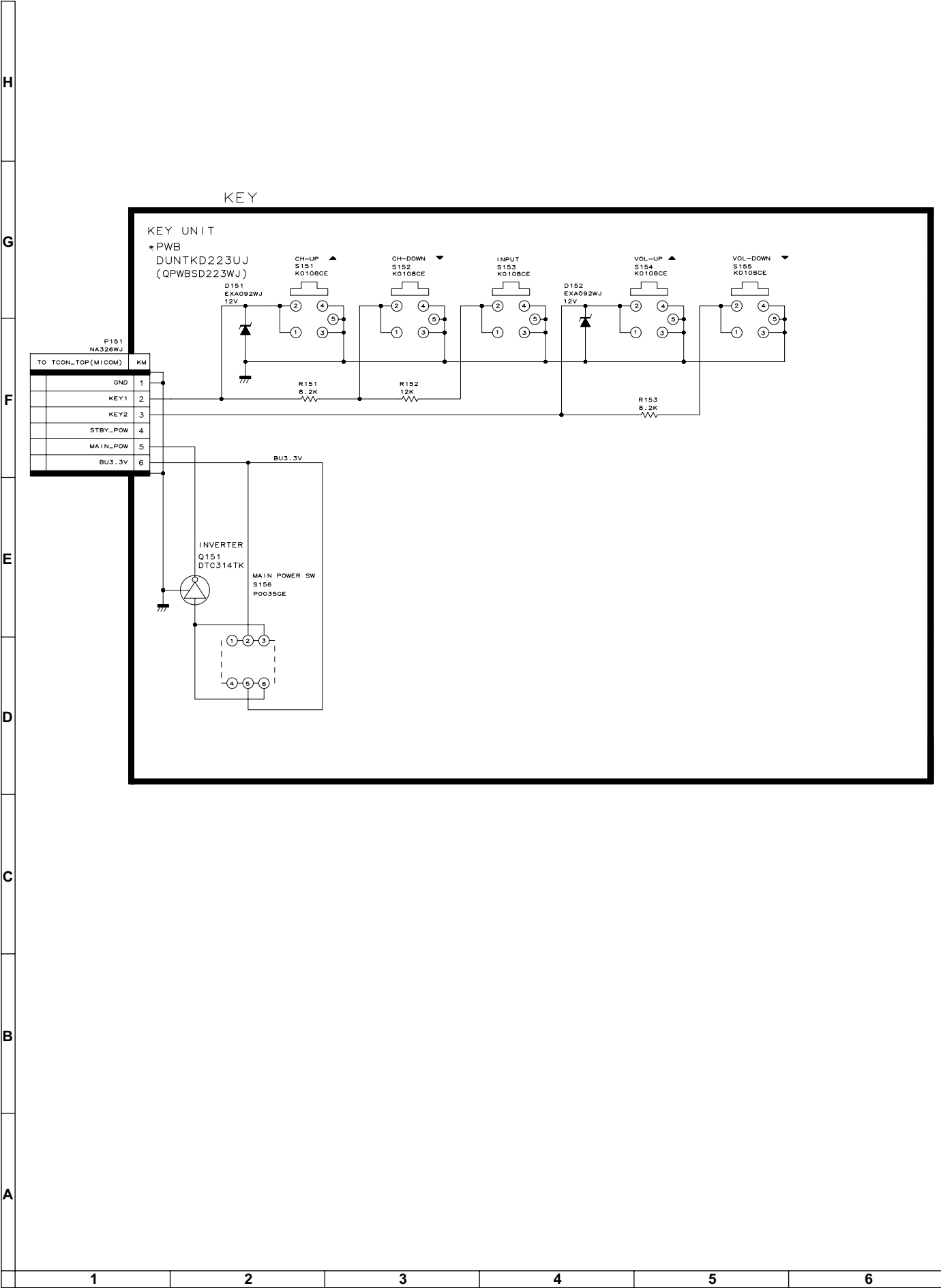


INVERTER-6 Unit (DISPLAY)

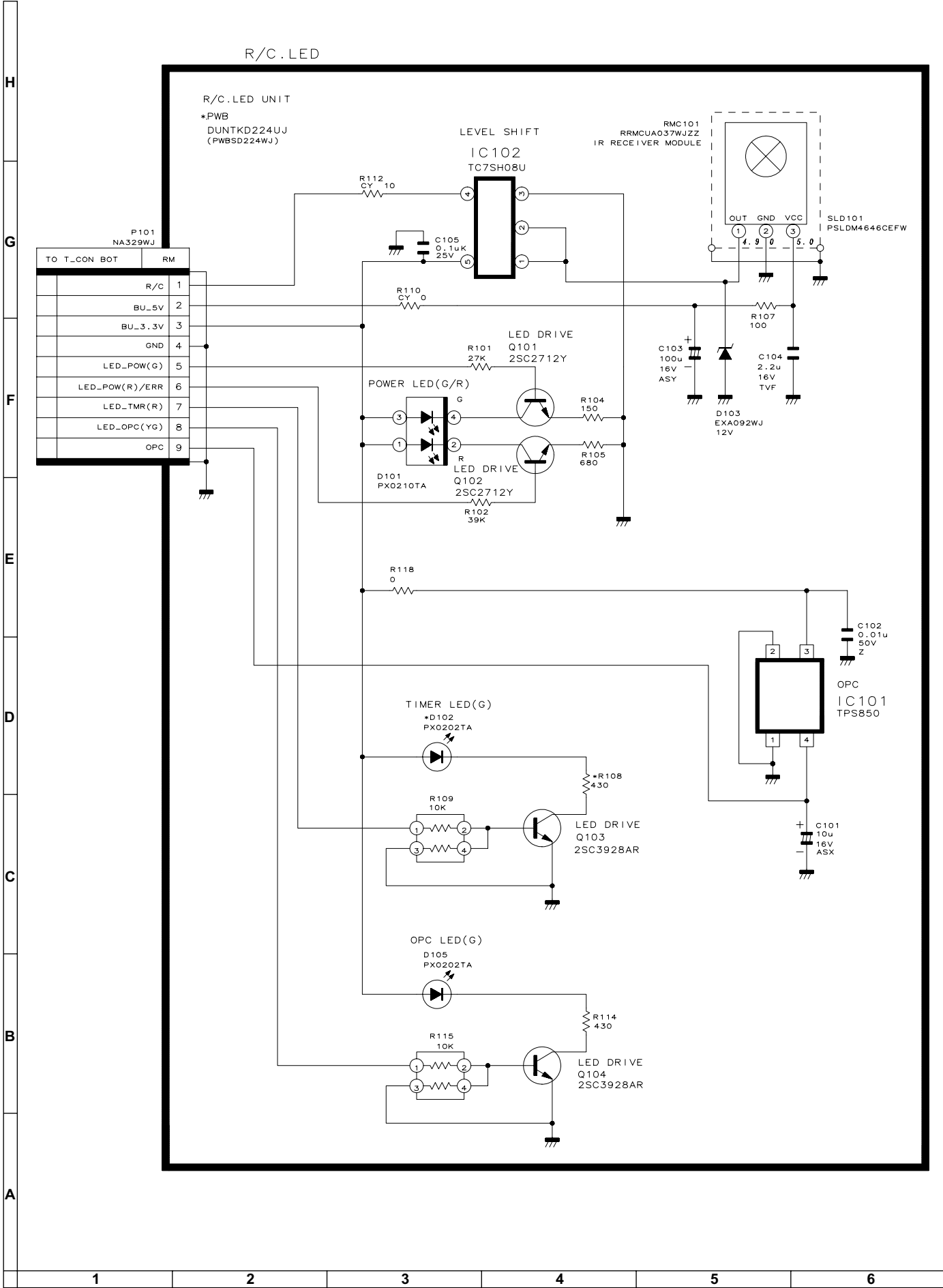
INVERTER 6



KEY Unit (DISPLAY)



R/C, LED Unit (DISPLAY)



## D85

